

## **2024 Air and Space Power Conference**

### **Transcript – Resilience through Networking and Northern Bases**

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**Air Commander Australia**

GLEN BRAZ: Thank you, Michael. And I take stage after some excellent presentations this morning, and a tough act to follow after Cameron's excellent brief. And I understand some excellent presentations yesterday also. And for General Saltzman, to help your language progression, the last day or two, I have been skiving off at home, watching the telly. I ate enough cucumber sandwiches with crust to grow enough ticker and hopefully not have a barry. I enjoyed Cameron's thoughts today, particularly his thoughts on energy, on people, and autonomy. And I think there's a lot to take out of that. But before I go on, I'd like to acknowledge the Traditional Owners of the lands upon which we meet. This is Ngunnawal Country, and I pay my deepest respects to their Elders. I'd also like to acknowledge all of you, the many distinguished guests who have travelled here to share your time with us and make this event possible. Thank you. As Cameron alluded to, operating in Northern Australia presents both opportunity and challenge. Much of the land is harsh and remote. The heat can be searing and the rain torrential, and the infrastructure is underdeveloped, supply chains are challenging. I only wish I could move as much material as he does. Let's talk about the North. And to give our friends some perspective and context, as shown on this map, it's an area that represents just over half of Australia's land mass, but only 5% of our population resides there. But despite its remoteness and low population, Northern Australia is of high strategic importance to us. It is the gateway to our region and the region's gateway to us. That's why Cameron's operations are there in such scale. This puts a premium on protecting our northern approaches and projecting from them to safeguard Australia's national interests. Although, I should point out, while there is significant focus on our northern bases and infrastructure, this is not a fixation of our Air Force or Air Command. The recently released National Defence

Strategy acknowledged that Australia's security and prosperity are inextricably linked. Australia's future depends, in large part, upon protecting our economic connection to the world, upholding the rules-based order, maintaining favourable regional strategic balance, and contributing to the collective security of the Indo-Pacific. Many of you have read this already. As has been said for several years, and as has been a tenet of this conference, Australia is facing the most challenging strategic environment since the lead-up to the Second World War. Our region continues to experience unprecedented conventional and non-conventional military build-up which - as noted in the National Defence Strategy - is taking place without strategic reassurance or transparency. Such uncertainty is detrimental to regional stability and accord, which is why the Royal Australian Air Force seeks to work openly with regional partners in pursuit of shared interests. In these challenging times, it is clear that business-as-usual approach will not suffice. Today's strategic environment requires new ways of thinking and working, and new partners to work with. Defending Australia's interests will not rest solely on our Defence Force. It will require the combined efforts of all of government, with academia, local industry, and parts of our civil population. We seek to work with people and partners, both old and new. Which brings me to my presentation. Today, I'm here to speak about how the Royal Australian Air Force is building resilience through networking and our northern bases. I want to share with you how we are changing the operational mindset and tactics to better harness resources across Northern Australia. Before I do that, it might help to first identify what is meant by our Northern Bases. As shown on this map, I'm referring to RAAF Bases Darwin and Tindal in the Northern Territory and RAAF Base Townsville in Queensland, which are all fully operational bases. Many of you have been there. Additionally, we have RAAF Bases Learmonth and Curtin in Western Australia, and in Far North Queensland - bare bases and can accommodate operational units at a moment's notice. When the Australian Government released the Defence Strategic Review last year, it identified as a key priority the need to improve the ability of the Australian Defence Force to operate from our Northern Bases, including our bare bases. Work has been under way for some time to strengthen our Northern Bases, but strengthening our ability to

operate there goes beyond the physical bases and airfields. Bolstering our ability to operate from Northern Bases requires links with a greater network of friends, partners, and allied nations. A network of us, as I like to say. It's important to briefly explain what I mean by that network. And it means many things. But for me in this framework, it's two or more parties who have shared interests. And who work together by sharing resources and information. The network also offers capacity, redundancy, and a degree of interchangeability that generates resilience, regardless of shared interests, are at the core of the concept. In this context, those shared interests are regional stability, peace and prosperity, and the parties range from local government, industry, local communities, and all the way through to international partners and allied nations. Creating a network to protect and stabilise our northern approaches is not a new concept for our Air Force. We did it with great success during the Second World War and we will continue to do it today. During the Second World War - and especially after the Darwin attacks in 1942 - with the help of allied nations, we developed a diverse and expansive network across Australia, predominantly in our north. We work with small towns, civil aerodromes, and local farmers to develop mini air bases across our northern approaches. These airfields and airstrips serve both the Royal Australian Air Force and our allied partners, and from there we defended Australian territory. In fact, if you travel along the Stuart Highway, the road that connects Darwin to southern Australia, you'll still see remnants of these old strips. But while airfields are important, harder still are the other elements that formed the weapons system that we know as an air base. As Winston Churchill once said, "Strange as it may seem, the Air Force, except in the air, is the least mobile of all the services." A squadron can reach its destination in a few hours, but its establishments, depots, fuel, spare parts and workshops take many weeks or even months to develop. Challenge accepted. Of course, our diverse and expansive network during the war included much more than just airstrips. It also included logistics, weapons, and fuel storage, and, of course, maintenance workshops. In the Northern Territory, at Gorrie Airfield, RAAF ground elements serviced and repaired aircraft, maintained fuel dumps, moved personnel and stores, and looked after signals and genuinely administration. Further south at

Alice Springs, ground support teams catered for all service aircraft proceeding to or from the Northern Bases. North Queensland also had a network, as did Western Australia. It was quite an undertaking, especially considering some of the operational bases conducted during the war years were secret bases. They were never spoken about by Government or reported in the media. Keeping an air base secret today presents other issues. As you can see, though, the bases were not just a network of airfields. With US and Dutch forces, they were a network of partners too. While a network of this construct served us well in the Second World War, much has changed since then and much continues to change at a rapid rate. There has been much talk in recent years, as always, to the changing character of war. It can be argued that the nature of war is immutable, it doesn't change. But we see the character of war, how war is fought, the tactics, technology, the doctrine, processes and procedures, evolves rapidly. Usually it's military ingenuity and innovation driving change in the character of war. But this time, we know as a primary driver, is technological advancement, which is shifting how wars are fought. I'm talking about technology like artificial intelligence, autonomous systems, hypersonics, directed energy, advanced sensors, and renewable energy. While the characteristics of air power - reach, perspective and responsiveness - have not changed, nor as the fundamental role of air power in national defence, what is changing is how air power will be delivered. How we think about air power, and therefore how we think about air basing, is changing. Not all that long ago, intelligence was often sourced via expensive and exclusive technology. But today, with open-source data and an increasing number of sensors, data is ubiquitous. Although, I must note, intelligence in the sea of data remains elusive, and there is nothing new here. Yet data flows continue to increase, with so many sensors that capture battlefield visuals and electronic signatures, the battlefield data available to us will again increase a hundred-fold or more. We must also consider what will happen when we team this data more seamlessly with machines. How we move data around the weapons systems and the battlefield will become really important. The networks that allow us to do that need to match it. All of this changes how we are both seen in the environment and how we see in the environment. As well

as the advancement of technology, the democratisation of this same technology is also changing the application of air power. We all seek technology that is both advanced and relatively cheap. It is therefore readily accessible. In the past decade, we've seen both nation state and non-state actors generate significant asymmetric air power effects using cheap, off-the-shelf, uncrewed systems. We have witnessed the impact these inexpensive drones can have on large and expensive assets. The democratisation changes the military advantage and sees the emergence of new threats. This is true in the other domains as well. Again, as air power changes, so too must our notions of the bases and places used to bring about air power. In the environment I've just painted, the risks to large operational bases and their expensive platforms becomes a significant concern. This is why we are well-advanced in developing a concept we know as agile operations. Agile operations centres on decentralising and mobility, the ability to manoeuvre to be a highly effective but survivable force. It focuses on delivery of air power effects via dispersed air base operations, supported by an adaptable logistics footprint across Air Force and the wider Australian Defence Force, including possible support from partners and allies. It's all about threat mitigation. We pick up our most important functions and move them with us. It allows us to take a punch and be ready to punch back. This is not new to many of you, who have operated this way over many years, but our context is different and technology is giving us more options. Agile operations builds resilience into our Air Force because, in contested and austere environments, it allows us to rapidly recover and resume operations. The Air Domain Team needs the capacity to move and achieve mission success from where they are with the resources they have. As I have mentioned, many air forces around the world have a long history of this approach, but it is not a concept that has been widely and deeply embedded in the operations of our Air Force until now. We are making agile operations our new normal, our business-as-usual approach. The mindset is being etched into our people. One key element to implement this is a diverse and expansive network across our northern approaches, similar to operations in the Second World War. Our Air Force is establishing the Northern Air Base Network, which comprises established military bases as well as other

places that can support expeditionary air power. The use of multiple locations will complicate enemy targeting in the case of an enemy strike on a major base, it lets us trade space for time. Air power effects will be achieved by moving fast and flexibly, and harnessing technology in both traditional and novel ways, as well as using disperse to complicate enemy targeting, cyber and electronic warfare will also play fundamental roles, as will uncrewed aircraft, which can operate as a wingman, confuse enemy targeting, as well as protect and threaten military assets. It is this combination of adopting agile operations, while harnessing technology, that ensures we are highly effective but survivable force in today's operating environment. Technology will help us generate the tempo required, but it's not the only element we need. Effective combat power will still require the element of surprise, and we achieve this by moving quickly, without predictability, harnessing both crewed and uncrewed systems. As well as the Australian Northern Air Base Network, we are also developing and strengthening supply lines, local connections, and command-and-control systems and concepts. We have appointed regional coordinators to engage with communities in the north to better integrate civilian and military capacity, as well as working closely with the local population to ensure success. We're also looking to our national support base and working across the department to build more resilience, logistics and supply chains. Our enhanced air cooperation, which is a program of engagement between Australia and the United States, is also heavily focused on logistics capacity and building interoperability between US platforms and capabilities. To better build resilience, we are also pivoting how we train. It has been tempting to conduct exercises in the dry season or when weather is perfect to protect some key training outcomes. But now we are operating in the north of Australia throughout the year. Not just the dry season. We are increasingly an Air Force that can operate anywhere, any time. These skills in adverse conditions are important to hone logistics requirements, as well as familiarise local communities with our operations, and help us work as an integrated force with Navy, Army, Space, and Cyber. It lets our people grow in confidence that they can do the job where we need them to. As outlined in the National Defence Strategy, also key to defending Australia, and our immediate region, is practising operations with our

partners. With all of you. Nations in our region are bound through shared interests, history, geography, and values. In Northern Australia, we conduct joint military exercises with allies and partners to enhance capability, integration and engagement, and many of you know exercises Talisman Sabre and Pitch Black as prime examples of these key events. Held every two years, Exercise Pitch Black is our most significant international engagement activity. In two months from now, 16 countries will take to the skies in Northern Australia as part of this year's exercise. It gives 16 countries the opportunity to train and operate in some of the largest and most austere airspace in the world. This also provides opportunity to practise disaster response scenarios and strengthen regional security cooperation. Pitch Black strengthens us as a network and helps us respond to shared challenges. Moving further beyond our shores, we take part in maritime domain awareness activities with many regional and valued partners. Many of you have worked with us to promote shared understanding, connect our people, and build trust. Involvement in frameworks such as the Five Power Defence Arrangements and other multilateral agreements creates familiarity and assurance we can work together respectfully, respect for culture, respect for international law, and respect for sovereignty. A few examples of this type of support and cooperation are us working with the South-West Pacific Nations in an exercise, Exercise Christmas Drop, and our rotating detachments in Papua New Guinea and Fiji. Our integration with the New Zealand Defence Force training and the training detachment at RAAF Pearce are other examples. It provides resilience to our region, regardless of scale or complexity. Importantly, the focus is not only on the application of combat elements but for combat support, integrated logistics, medical teams, and the flexible use of cross-skilled aviators across a gamut of activities. This enhances regional security and promotes peace and stability in the broader Indo-Pacific region. It provides us all with the confidence that we have each other's backs. For such a remote part of the world, our northern skies are well-known to aircraft from other nations. Come July, locals in Darwin will once again have the spectacle of sighting F-15s from Singapore, F-35s from Italy, F-16s from Indonesia, Typhoons from the UK, Germany and Spain, and F/A-50s from the Philippines, among many others. It is

truly something special to witness, and it's a striking reminder that stability in our region is a team effort. From the north, we can operate as a highly connected, dispersed Air Force that can manoeuvre across the network. We will work with locals, industry, international partners, and allied nations while harnessing technology to secure our northern approaches. Our people, our people will combine agility and technology to project air power as necessary to protect our gateway to the region and protect our shared interests. Networked and together, we are stronger. Thank you. (APPLAUSE)

MICHAEL SLEEMAN: Thank you, Air Vice-Marshal Braz, for sharing your views on operating in the north. I will jump straight to the app and then I will look to the audience for any questions. Linking to the previous presentation by Mr Cam Smith from Fortescue, he highlighted they are operating and maintaining aerodromes in the north. Is Defence engaging with industry to leverage these facilities if and when required?

GLEN BRAZ: That's a great question. And when we're looking at our regional coordinators across the north, we're using them to connect with communities, councils, and industry for all of the reasons so that we understand the terrain and the communities and the organisations that are operating in those parts of Australia, are aware of what we do and how we do it. So that if we wanted to briefly drop in to an airfield that may be operated by a major mining organisation, we're able to do that, and we're able to do that in a way that is mutually understanding and mutually supportive. We're looking at all the options across the places and bases in our north so that we can continue to support air power and the different forms of air power as it continues to evolve in the ways that work for us and that work for the region.

MICHAEL SLEEMAN: Do we have any questions from the audience? OK, back to the app. Agile operations will require a risk-based approach to move people, weapons and capabilities quickly to austere locations. How do we manage these - the tension between regulations with DASA, and you mentioned cross-skilled



aviators, where there's necessary restrictions on what aviators can do, so how do we expand their scope of operations while still maintaining the safety and the regulations that we need to operate under?

GLEN BRAZ: Yeah, that's a really good question, and I think it's important to note that we operate inside those frameworks day in, day out, but there's a lot of flexibility in the provisions and that we need to also understand that our people will step up to the challenge and mindsets like particular skill sets need to be challenged. And people, when given the opportunity and the training to gain additional skills, they shine in those areas in ways that present very little risk to the organisation. So, we're seeking to continue to train and execute that way, not only with our own aviators in a cross-skilled environment but with personnel and people from across all of your teams so that we can share that capacity for whatever reason we choose, at the right time, to achieve the mission. So, it's possible inside the framework, while preserving that safety and that system approach, and we shouldn't be shy about challenging interesting ways to achieve the outcome while staying compliant and achieving that compliance that's fundamental to what we do.

MICHAEL SLEEMAN: I'll get another question from the app and then look to the audience. Again linking back to the previous presentation, do you see the FIFO model, as discussed by Mr Smith, as a realistic option for the ADF in coming years? Or how are we looking to adjust how we deploy our people?

GLEN BRAZ: Yeah, and I think the FIFO model is one thing that we're looking at. We sort of do it, in a form, but it's not with the same regularity or consistency that a 24/7, 365 operation needs. We may get to that scenario in due course, where we want to fly people, where it works for those people, into those environments so that we can continue to operate at the scale and tempo that we need to do, while maintaining the sustainability of that for our people without creating undue stress on them, or their families. Now, there's pros and cons and costs of doing all of those things, but nothing is off the table and we'll explore all

of the options to make sure that we can continue to be present year-round, where we need to be across the network.

MICHAEL SLEEMAN: Do we have any questions from the audience?

>> Hi, sir. Greetings. Look, I was interested with Cam Smith's presentation that Fortescue owned some of a fleet, not their total supply chain, of shipping to understand the market, to ensure they understood their extended supply chain from their production onshore to their global markets. I was just wondering what visibility and assurance you have of your supply chains, or our supply chains, past that first-order level of a contractor? So, how well do we understand beyond the contract with whatever oil company provides fuel in Darwin back down the supply chain that we have, and understanding of the offshore markets that we have understanding beyond the one railway line and one road south, that we understand our supply chains beyond what we can influence, our second and third order?

GLEN BRAZ: Thanks, Doc. I'd say, to categorise that, it's an emerging understanding, and one that's coming into sharp focus as we continue to evolve our approach to what is required for resilience in operations in an environment that's underpinned by significant competition. And an uncomfortable competition. So, it makes us ask those questions of ourselves, and we rightly should seek those answers to make sure we understand what's possible inside our own system and we test it appropriately. It's part of what we do day in, day out, to train as we fight. We need to extend that concept into all parts of our organisation. So, it's growing. We're working very closely with the joint logistics system inside the department to really tease out those questions, the understanding, and to fold those lessons into how we exercise and operate day in, day out, so that we can start to explore ways to build resilience and understand supply chain surety moving forward in the context that matters for Australia.

MICHAEL SLEEMAN: Got time for one final question, and it's the top of the

pile. I will just adjust it slightly. It's from one of the caretakers in one of our bare bases. A lot of the support systems were set up in a time where there was less threat in the strategic environment and probably set up around efficiency perhaps more than effectiveness. Is there a need to adjust the civil-military relationship in those bases and what's done by military capability versus a contracted capability?

GLEN BRAZ: Yeah, I think what we need to be open to - and we are, and I'm really pleased with some of the work that's occurring across the department right now - where we have capabilities and capacity inside the military organisation that can contribute to the outputs, effectiveness, upkeep, sustainability and development of our bases. We're working through that now to harness those capabilities and to bring them to bear in our places and bases so that we can get the most bang for buck. It's difficult - it's a difficult part of the world to work in. It's an expensive part of the world to work in, so we need to be smart about how we do that. We can also do that with our partners. And many of you have capabilities that we can bring to bear in these parts of the world, where our shared interests would make sense for that to happen. And the organisation is adapting quickly inside the Australian Defence Department to be able to harness all capacity to get after the things that are most urgent and pressing, and that's occurring today. But it needs to continue to evolve and accelerate and we're working hard to get that done.