

Building Fighting Depth Panel:

Moderator:

Wing Commander Jacinta Carroll

Panel Members:

Air Vice-Marshal Steve Pesce, AM, Air Vice-Marshal Glen Braz, AM, CSC, DSM, Air Vice-Marshal Nicholas Hogan, CSC

GPCAPT J LAROCHE: Well, good afternoon ladies and gentlemen and welcome back from lunch. I trust you're all well fed. The Convention Centre here does a fantastic job with their food, I'm sure you'll agree.

We now move into our first panel session after lunch, Building Fighting Depth. The panel will explore how Air Force is building fighting depth in capability and capacity across our systems, our processes and importantly our people. We are privileged to be joined by our senior Air Force leaders to take us further into how we generate depth in air power and contribute to an integrated, ready and resilient force.

Unfortunately, Wing Commander Chris McGuinness has had to deal with an unexpected personal matter and is unable to join us for this session. The panel will instead be moderated by Wing Commander Jacinta Carroll. Wing Commander Carroll is an Air Intelligence Officer currently posted to the Air and Space Power Centre with prior experience in plans, intelligence and international engagement roles. In addition to her reserve service, she has worked extensively across national and international security and strategy, intelligence and planning. She's worked in government as well as in think tanks and the academic sector. Wing Commander Carroll is also a member of the Australian Government Senior Executive Service where she currently is working to deliver defence strategic digital capability. Over to you Jacinta.

WGCDR J CARROLL: Well thanks very much sir and good afternoon everyone. Welcome back from lunch and to this panel discussion, which is focused on the theme of today's conference, Building Fighting Depth.

Building Fighting Depth is about creating more options, in more places more often. It's about adding capacity, capability and resilience across people, systems and processes so that we can create depth in posture, in space and in time. Building Fighting Depth has many meanings, something the Air Force is doing for itself, something that the Air Force offers to the Australian Defence Force, to government and to the nation as a whole.

And as the Chief said this morning, building fighting depth is also an idea. It's an idea to guide the way people are thinking and operating. And we want our aviators and the wider air domain team to ask "Is what I'm doing adding fighting depth in some way?"

Over the next 45 minutes of discussion and Q&A, we'll explore what this idea means and how the Air Force is going about this in challenging times. We'll also be looking at how we could be doing things a bit differently.

We're very fortunate this afternoon to have three of the Royal Australian Air Force's key leaders in its efforts to build fighting depth. Their full biographies are in the program so I'll provide a brief overview only. But note that they have responsibility together across strategy, workforce, capability, training, readiness and preparedness amongst others.

Firstly, Air Vice Marshal Steve Pesce was appointed the Deputy Chief of Air Force in January 2026. In this role, he's responsible for leading key aspects of Air Force business, including personnel, strategy and international engagement, and of course serving as the Chief's Deputy. Air Vice Marshal Pesce has an extensive career as a test pilot and in air mobility operations and capability, accruing more than 5,500 hours flying over 40 different aircraft types. He's held command at the squadron and wing levels and served in staff roles across defence, including as Chief of Staff to the Chief of the Defence Force.

Air Vice Marshal Nick Hogan was appointed Head of Air Force Capability in December 2024. In this role, he oversees the planning, development and delivery of future Air Force capabilities. Air Vice Marshal Hogan flew over 6,500 hours in the C-130 Hercules across all its many and varied roles and missions, including operations around the world. He too has commanded at squadron and wing levels and also led the 2020 Defence Space Domain Review that led to the creation of Defence Space Command.

Next, Air Vice Marshal Glenn Braz became the Air Commander Australia in July 2023. As the Air Commander, he is responsible for the readiness and effectiveness of the current Air Force across its six groups. Air Marshal Braz's primary background is fast jet aircraft, including the F-111, the F-18F and EA-18G. He's commanded at the squadron, wing group and command levels, including commanding the Australian Air Task Group in the Middle East. He's also filled key roles across defence, including being the Senior Military Officer in Australia's National Signals Intelligence Agency.

Gentlemen, Sirs, welcome and thank you so much for being here today.

So to set the scene, what I'd like to ask you each, in turn, is to talk about what building fighting depth means for the RAAF, the Australian Defence Force and Australia from your various perspectives and your current roles. If I might start with you, Sir.

AVM S PESCE: Sure, thanks Jacinta. I guess quite a broad question there around Air Force, ADF and national resilience. I guess with national resilience, I guess fuel security is one of the key topics, and there are many, but I'm probably going to stick to my lane, which is specifically what we're doing within the Air Force and what we should be doing within the broader organisation to generate that fighting depth.

So, and there are many areas we should be looking at. One of my key focus areas as I guess responsible for the workforce, organisational structure and the culture of that workforce is looking at ways that we can actually optimise our organisational structure to generate the effect we need for the integrated force.

So what do I mean by that?

An organisation like the ADF needs to be optimised for war and then you adapt that structure for peacetime and competition. So with 19 groups and services loosely held together through three tiers of committee, most people would agree that that's not the most optimal structure in terms of command relationships to execute I guess orders quickly.

So I think that looking at the way we're actually structured in peacetime in a way that you're not thinking about lifting and shifting and redesigning that workforce and organisational structure in conflict when you are under attack and your C2 systems sort of degraded. That's probably one of the key things that we could be doing to building that resilience and fighting depth.

WGCDR J CARROLL: It's really the ready to fight tonight concept, isn't it?

AVM S PESCE: Yeah, applied to workforce.

WGCDR J CARROLL: That's great. Air Vice Marshall Hogan?

AVM N HOGAN: Thanks Jacinta. And for those that haven't had the privilege of being on stage, we can't really see you. There's a bank of computers that may fall on us at any time and there's a doomsday clock right in front of us. So straight after lunch, we just want to welcome you to probably the end of our careers as we stand here or sit in here in front of you.

It's an interesting question that you pose in terms of my role and as Steve said, he wanted to stay roughly in his lane. I'm going to bleed across everybody's lanes because it's more fun than not. But specifically-

WGCDR J CARROLL: I did speak to you all beforehand.

AVM N HOGAN: Yeah, I was told to keep in check. One of the things that's of course important is that as we build fighting depth, we've already heard from our Swedish colleague earlier today talking about the ability to be resilient and to be able to operate in a variety of conditions depending on the situation that you find yourself.

For us, of course, that means compatibility with allies and key partners. We work really hard inside the capability area to make sure that we know where we link, not only across the integrated focus force in terms of the Australian Defence Force and the wider defence organisation, but also in terms of how we work with key allies and partners.

So that is definitely a focus as we look forward, how we integrate into those sort of the deeper ways of war fighting that we talk about. And of course, looking at those lessons from other conflicts around the world and trying to see what fits in our context as we go forward.

You can't react to everything. You need to be able to have a deliberate approach at times, but we also need to be resilient enough to change as required.

WGCDR J CARROLL: Great, thanks. Sir?

AVM G BRAZ: Thanks Jacinta. Now we've figured out the comedy act over here, cleared that role up. Hey, as the force generation and preparedness lead, I guess, for the panel, for me, the question is really about how we have to think differently as a starting point in terms of "Hey, this is a fight potentially that we will have to fight a new way and a different way, and we need to be prepared and trained and educated to take that intellectual step as the first sort of first movement in the right direction.

As part of that, we need to therefore force generate differently. There's only so much capacity in the system to train and force generate, so certain things will have to be removed from the program. We need to prioritise really closely, and we need to make sure we're focused on the right things at the right place so that we can fight not just the way we want to fight, but the way we have to, and that we're prepared and trained and educated to do all of those things in a way that generates depth, maximises the agility and the options that our small, realistically small force can actually generate, and the trade-offs that we have to make on the journey of preparedness to get after that.

WGCDR J CARROLL: So I might stay with you on that because you've identified some challenges that we have, and I wonder if you could share what do you see as one of the biggest challenges, and I think you've articulated, but how do we focus on that, and how do we make the steps to create that change, changing, I suppose, to an air-mindedness view, but also giving up some things?

AVM G BRAZ: Yeah, it's an interesting way. I think we need to reimagine how we conceptualise, imagine and measure what we think effective air power is, and I think that's actually the challenge. We need to use Chris McGuinness's words, we need to be prepared to imagine a different future for air power in our service, and we need to do that together.

So that is the first step, I think, is being bold and brave enough to understand that this is different. We do need to think differently. We need to discard and jettison some of the old notions that we very easily cling to as a notion of a measure of air power, and we need to put that into context and make it relevant.

WGCDR J CARROLL: I might now just ask, ask AVM Hogan, when we think about building fighting depth, if you're standing here or sitting here in two years' time, what would good enough building fighting depth look like?

AVM N HOGAN: Did you say two years' time?

WGCDR J CARROLL: Yes.

AVM N HOGAN: Okay, because originally I think the question was 10 years, and I was like, I was going to be retired by then, so not really my problem. But in two years' time, clearly I need to look that one closely.

What I would say is, looking at fighting depth, you can break it probably and arguably up into four areas, one being mass, one being preparedness, one being resilience, and the other one being sustainment. So if you take those four elements of fighting depth, and again, I say arguably, then there's areas that you need to focus on and get right as we go.

One of the areas that we are acutely looking at right now is as we grow the workforce, and Steve can talk to this as required, but we realise there's a finite resource. And as the Air Commander was saying, there's a finite capacity in the system to train those people. So that unlocks an opportunity for us to look towards autonomous options. And there is no better example in the world, and I will highlight this, and I know Tercay is in the room here, but MQ-28 firing off an AMRAAM on the 8th of December last year, a Tier 1 weapon off a Tier 1 weapon system is an incredible effort, and the fact that it was done in partnership with industry, and I mean true partnership with industry in a space of less than 12 months is an incredible effort. And I think that leaning forward of our organisation shows a change in the focus and the way that we are looking at in an attempt to increase mass.

Minister for Defence Industry, Mr Conroy, has openly stated that we're looking at a minimum of a 3 to 1 uncrewed to crewed ratio. We are in the midst of taking those. We'll take our first three MQ-28s at the end of the calendar year, hand those over to the Air Commander as they ingest those into our order of battle.

WGCDR J CARROLL: And thanks for talking about autonomous systems, because for those who were here in the previous session, Dr Peter Layton was talking about that and sort of posing the question. So what we hear from that is Air Force is there, is engaged, is thinking about that, but probably a bit more work to get to that full capability.

AVM N HOGAN: There's a journey that we're on. We've been on the journey for quite some time, so I think we're far more advanced than some in that respect. I mean if we look across the integrated force, you have Ghost Bat of course leading the way, you've got Ghost Shark some way behind, and then maybe a Ghost Wombat. People have heard me say this before, so I realise I wasn't going to get as many laughs as I normally do. But Army is certainly embarking on autonomous systems, so as an integrated force, we are looking at that and how we combine to get the best effect out of those autonomous capabilities.

WGCDR J CARROLL: Thank you. I want to turn now to DCAF. Looking at, we talk about depth in posture, space and time and trying to reconcile our enduring and large strategic challenges, vast distances, present threats, but also limited resources. There's an inevitable tension then between the demands of today that all of you have to deal with and the demands of tomorrow. I'm

wondering if you could talk through, particularly from that Air Force perspective, how did the three of you work together and how do you work with the other services and groups to manage these competing demands and manage competing resources to fight tonight but then also build for the future?

AVM S PESCE: So other than the daily tension I have with having to work with head of air capability,

AVM N HOGAN: I really wish you'd asked me that question first.

AVM S PESCE: Thanks. So look, now tension can have a bit of a pejorative connotation to that, but the reality is that we work and live in a resource constrained universe and if we were to receive infinity dollars and infinity people, then we would still be arguing over resources. So really our job is to actually understand where the key risks are and make compromises on a daily basis.

Now, whether that results in tensions, I'm not necessarily convinced of that, but to give you some examples, we manage competing priorities around investment in capital acquisition for the future force against priorities of the force in being and what we do with that force in being. We manage, I guess, not to use the word tensions, but we manage competing priorities around regulatory frameworks and compliance to those regulatory frameworks against rapid execution of activities, whether they be acquisition or aviation in general, to a high risk threshold.

So those competing priorities are part and parcel of our day-to-day jobs and if you're not able to prioritise, in fact, if everything is a number one priority then you're not actually prioritising, which means that we're not doing our job. So that's probably the easiest way I could describe that is, I don't think it relates, it results in tension per se, but there are genuine competing priorities that we have to deal with on a daily basis.

WGCDR J CARROLL: Thank you. And for the last topic that I'll talk about before we go to questions, so a reminder to get your questions into the app please. I might ask the Air Commander to talk to us a little bit about the relationship between Airpower and our national aviation enterprise. As we heard from the Chief today, we are an aviation nation. We're dependent on aviation services and connectivity. We have a very large national air power enterprise, 16,000 registered aircraft, 30 plus thousand active pilots, nearly 60,000 working in the aviation sectors. That said, our defence strategic review, the national defence strategy said, build on force generation in the south but let's move to operating in the north. The Australian Strategic Policy Institute published a report today saying that when we do that, we tend to go in and out but there's not a sustainable aviation support base and others. ASPI's called for a national engine in the north to sustain these. I'm just wondering if you could comment on the aviation piece, air power more broadly, what you need more broadly from the nation and from industry to support your operations across the north.

AVM G BRAZ: Yeah, thanks Jacinta. I'll talk about that in two parts. I'll talk about the national enterprise first of all and then the engine that is sort of mooted or proposed in the ASPI article that you talk about.

First of all, to the enterprise, Australia is an air power nation by definition and we know that and we're actually good at it as a nation and a community. That does give us, for a small nation with vast geography, a significant depth opportunity so there is huge potential in that baseline enterprise. What we need to continue to do is elevate it as part of the national conversation. We need to make sure that we take an active role and I know the chief is very active in this, in convening the national air power enterprise and just make it clear where we think we want to take that. Clearly in consultation with government and the rest of the nation and the whole stakeholder pool, where we want to take that, who's included and what we see as the opportunity collectively within that enterprise.

Right now I'm not sure my notion of the national air power enterprise aligns with many other parts of the industry and we need to bridge that gap but we're on the journey and that's going to take some time but that approach will be something to normalise and stabilise across the organisation. I think there's huge opportunity if we get that right and I think we're very clear about starting that journey soon.

WGCDR J CARROLL: We heard from Brigadier General Magnuson earlier of the Swedish experience and we said how do you get that industry buy in and he said talk to them but constantly talk also to other agencies as well so that's a consistent theme.

AVM G BRAZ: Yeah that's right so we need the structures, the dialogues and the habits to support that discussion and I think that's certainly emerging quickly and as it should because as I've already said, the opportunity and potential of the nation in an air power sense is quite vast and significant so it's a very exciting notion.

In terms of the engine room in the north, there's lots of ways to look at that. The Air Force has some capacity in the north through places like Tindal particularly where we treat it differently. It is a node, it's not as big and heavy as our southern generation bases but it is an important node and so we're pretty used to the trade-offs that come with that sort of remoteness and the opportunities. Now there's also a discussion to be had I think about effectiveness versus efficiency here and certainly we are geared for efficiency and we're geared for cost effectiveness. But also the current posture and lay down is pretty reasonably geared I think to exploit the nature of air power in its responsiveness, its agility and its ability to get places pretty quickly and while I'm not a fan of purely episodic air power that's always an exquisite sort of momentary effect in any sort of environment we do need to think differently about that. But equally I'm also conscious of hey we need to first of all survive in the context that we find ourselves in, we need to be smart about how we get after that and we need to be very savvy about how we posture and create dilemmas for potential adversaries in our national posture.

Noting and my team in the Air Command have heard me say this many times we are certainly focused on the north but we're not fixated and certainly I think from a national perspective it's important to realise that as recent historic events have indicated we have a concern that spans more than just the north and our equities lie in a 360 degree radius around the country and we just need to keep that in mind also so there is no sanctuary but there is smart ways to posture.

WGCDR J CARROLL: Wonderful thank you. We're now getting to opening up our conversation to Q&A. We've got unsurprisingly with our majority blue audience the conversation in your presence has generated a lot of questions and I have it on good authority that DCAF has offered to take the first one. It all depends on how much chocolate I'm given.

So the first one comes again from Brigadier General Magnusson's comments. We heard earlier that the best thing the Swedish Air Force did was to optimise was to have a single chain of command. The comment is, and I throw this out to the panel, we seem to be doing the opposite. Comment on that but also what do you think the optimal solution is?

AVM S PESCE: I'm happy to take that one. I kind of alluded to the fact that you know an organisation whose sole aim is to defeat the enemy needs to be optimised and structured for war and then you adapt that structure for competition.

And so my sense in fact going back to that specific presentation I couldn't help noticing but the number of platforms that are operated by Sweden in its orbit is equivalent if not larger to the Australian Air Force but I think the numbers that were mooted were about six and a half thousand permanent and about four thousand reservists so about half of the size of our Air Force.

So there's a genuine question of efficiency and streamlining of organisational structure such that we can actually generate more effect. And so trying to do more is not the answer for Australia. So we are a very small population base, very limited manufacturing capacity, very long vulnerable logistics and supply lines. And so small population base with a fertility rate below 1.7 with a genuine push to reduce migration rate which actually is what's required to drive our labour rate.

And so we've got ourselves in this position where we're quite wealthy, we inject capital into the equation and automatically we see minimal growth and high inflation. So we're in a bit of a pickle there.

So these are major structural issues that we can't resolve within the ADF. What we can do though is look for ways that we are optimising our own workforce structure. So to give you an idea of what we are doing in Air Force and the Chief directed this last year or two years ago, we have identified functional areas that we could afford to take some risk in during conflict. That doesn't mean that they're not very important, it just means that we've identified areas that are more important.

It goes back to that point I made earlier about if you're not prioritising, if everything's a number one priority then you're not prioritising and we as senior leaders are not doing our job. So what does that enable us to do? It enables us to identify functional areas where we can take some risk in war, reappportion those personnel into war fighting functions.

So for us for example we might identify areas in our Air Force headquarters that can be reassigned to the AOC. Because we've identified specific positions it gives us the opportunity to train and force generate those people within a posting cycle and it actually allows us to build some resilience in our C2 structures and war fighting functions.

So I think that's a really good outcome for us and it's something that generates meaningful war fighting capacity and depth and resilience within our resource constraints within our organisation. And I would love to see similar methodology adopted across all of our 19 groups and services to be honest so that we have clarity with regard to what do we do with all of our ADF personnel in times of war. Most of those are highly trained, you know technically proficient senior people that could be better placed in war fighting functions and then be replaced with reservists, APS or contractors in their normal function.

So that's kind of where my thinking is at the moment. Large scale organisational change is difficult. So I think the technical term is organisational habitus, I call it inertia. And so I have yet in my 36 years of service identified an organisation that self identifies themselves that they probably should do other things and disband themselves. So that's part of our challenge when I talk about you know as managing cultural change within the Air Force, that's a challenge on me as well. So I might just leave it at that.

WGCDR J CARROLL: Yeah well thanks very much sir and there's points about reallocating people where we need uniform people is something that the UK's recent strategic defence review went to the heart of and actually making some decisions out of that.

Did anyone else want to comment on that or we've got we do have many many questions?

AVM N HOGAN: Sure and the best traditions of New Zealand rugby.

AVM G BRAZ: Thank you. But hey look we certainly need clarity of command but I would also sort of agree with Steve's points about we need an organisation that is structured for conflict and crisis that we then adapt to competition and I think that would serve us well. What it would do is in my view align far more closely the accountabilities and the responsibilities and so that we have people empowered to do what is expected in certain domains and then all of the authorities to be able to execute within that and I agree we are not there right now and I think we do need to look at strategic C2 reform and I think that works underway which is fantastic.

WGCDR J CARROLL: There is quite a move with domain responsibility and others isn't there Sir. Look we might continue on this theme we've got a great question here about people and culture again going to some of the commentary today with our other presentations. We've got a question here how can the RAAF contribute to the culture shift in Australia required to enable fighting depth which is reliant on the willingness and the support of the Australian public?

We do have a national defence strategy although it seems to be interpreted very commonly as being a defence strategy. Wondering sir are you Air Commander? Yeah so thanks.

ALL: Banter

AVM G BRAZ: The culture shift. Well look this is a really interesting conversation and it's one that needs to be a national conversation. We can be part of it. It's perhaps not necessarily in the

Australian context our role to lead it but perhaps be a catalyst for it and so look I really welcome that conversation and we are not Finland and we are not Sweden with the deep proximity and history.

We have a different historical context and we need to and a different geography so we need to just accommodate that and first of all it's like your first question. Hey the first step here is thinking that this is different and we need to be thinking that as a nation and yeah we are not doing that necessarily but I think there's great opportunity in starting that conversation and then from that subsequent outcomes will flow like a really mature and holistic approach to a national air power enterprise which would leverage key capacity of national power that I think is mostly untapped right now to be honest. There's huge potential in it.

We're not having the higher conversations to have the fulsome conversations and our southern ocean isolated geographic complacency is a real thing and in the current context we find ourselves globally I don't think it's a valid approach anymore.

AVM N HOGAN: And I'll just jump on that one. You know our strategic circumstances it's very clear the most stark they have been in decades and it's very clear in the national defence strategy it's been called out and I'm sure it'll be reinforced and the one that's due to come out shortly that that is not changing. So I agree with these wholeheartedly what the air commander is saying But the best way to do that is to inform not keep banging on and you know be the zealot. You want to be able to inform the national conversation to allow them to reach the conclusions. That will no doubt be required and we don't want to be surprised that's for sure.

WGCDR J CARROLL: Yeah I think as the chief talked to it this morning we've got a strong history of the Australian people are smart they do get it and that's where our air force comes from. I might ask if we can put the lights up for a moment and in the room so we can see if there's any questions in the room and open if you just put up your hand if anyone.

AVM S PESCE: I'm just glad somebody turned up I couldn't actually see the crowd before so...

WGCDR J CARROLL: It was a bit mysterious for a while wasn't it? Any are missing someone over here? Yes thanks very much James.

JS: My name is James Schobow from the Royal Air Force. Thank you for a fantastic panel. Some really exciting capabilities that were talked about you know leading with the MQ-28 and that recent AMRAAM firing. I do wonder how you are dealing here in Australia with the challenge of keeping pace with the world outside and the speed that we might need to reiterate and improve our capabilities in the future. I wonder if you could perhaps give me your thoughts on that.

AVM N HOGAN: Absolutely I'll jump on that one first and commiserations on the Six Nations seeing we're on the rugby theme. It might be too soon well done to the French.

Audience 1: Let us forget about the ashes.

AVM N HOGAN: Oh you've still got it that's good okay I'm glad. I could do this all day. All right so what I would say yeah being out in front is wonderful but you cannot keep pace if you don't continue

to invest but more importantly than invest looking at your the way in which you approach the problem and then understanding the risk tolerance of your organisation and where the organisation is caught in process or where it looks back at the legacy way of doing things understanding how you can take the next step at a pace that keeps with a potential adversary or stays in front of the challenge in front of you.

To give you an example I mean we're talking MQ-28 the thing is a it's a digital evolution of what is an aircraft to itself but we don't necessarily need to fly at each time to do a test. You can do all of that in the digital environment and then break glass and then fly it when you want. That's a tolerance level that we need to understand as an organisation and that's a journey that we're on. The perseverance that's required to keep fighting our processes as we talk about our organisation as it stands that evolution is always a test but I can tell you at the start of last year when we talked about firing a weapon off the MQ-28 there was a lot of people that were saying internally the organisation that just can't happen. And it does.

It's a bit like you winning the ashes at some point again. Well hopefully you've taken the mic off him so he can't respond.

WGCDR J CARROLL: A bit \as the Air Commander said it's imagining a different air force a different way of doing things. Any more in the here? Someone down the front if someone's able to. Harry thanks. It's down here.

Audience 2: Kia Ora gents and thanks very much for that. Australia's closest allies just across the ditch are undergoing their own generational change in their defence posture and I guess from the frame of a building fighting depth where would you like to see the NZDF focusing their efforts in building fighting depth that helps us as a coalition?

AVM G BRAZ: So first of all it's fantastic that we're having every opportunity to collaborate with our New Zealand defence team and look in terms of relationships we banter all day about rugby and cricket and whatever but when it comes to the local relationship we are like bickering siblings when it comes to that and if someone picks on one of us the other one's going to be in into the fight so we're grateful for that opportunity.

It's great to see New Zealand stepping up and wanting to grow and it's fantastic to be partnered with New Zealand on that journey and we absolutely welcome and relish every opportunity to lift and do that.

From my perspective it's just another operational opportunity to build depth in time and space and dilemmas that we would generate for a potential adversary. Noting putting things in and around our region with multiple axes to consider as a threat axes would change the calculus of a reasonable actor and I think that's what we should aim to do and we should aim to do it together every chance we get so good on you.

AVM N HOGAN: I'll just add interchangeability is an interesting discussion and you know we have been talking some time we have similar platforms and where we can interchangeable as opposed to

just interoperable the way that we are looking at doing maintenance across the P8 fleet and of course C130 fleet it doesn't matter what uniform you're wearing or what accent you have it just works just fine. I was recently had the privilege of being up at 37 Squadron and seeing New Zealand uniforms working in the same environment as the Australian uniforms and it did not matter who was being called on to do whatever. Very very impressive setup and there was no banter about sport clearly we were losing at the time so nothing to see here.

WGCDR J CARROLL: Thank you very much. We'll go back to some of the questions we have coming in on the app and this might be a loaded one I'll ask DECAF a loaded one coming from your one of your reserve officers.

How are we managing and planning to manage using our reserve forces in a time of conflict? How will we manage reservists in mission critical roles within the Australian public service and prioritisation of civilian defence personnel versus military? I'll note that our one of our Williams Foundation scholars had done some research into this and identified a very high number of reservists who are also in critical roles in emergency services and others. Can you talk to that?

AVM S PESCE: Well I alluded to earlier the fact that we are constrained because of our population base and so you could sort of narrow that down into ADF specific considerations of which reservists are in the mix. So you know a good example I use to illuminate some of those challenges is you know we might have a squadron that's counting on having a specific reservist to augment their activities without necessarily realising that that same reservist is employed as a contracted maintainer on a different aircraft platform as an aircraft prime for one of our primes.

So we just need to be careful that when we factor in what we believe to be workforce augmentation and supplementation which is actually what we use our reservists for that we're not planning to rob Peter to pay Paul. So I think we need to get a little more sophisticated in how we assess our total workforce and you know we talk about the integrated force operating across five domains and I've heard the term from CJOPS in fact saying it's five services across five domains and I'm going what are the other two services? Well it's Army, Navy, Air Force, APS and contractors.

So we need to and reservists are part of that mix as well so having clarity with regards to our total workforce availability where that workforce needs to be prioritised is important work that needs to be further refined as well.

So that's the first issue and then secondly I think we need to think more carefully about how we would utilise a reservist workforce. I think Army have a different model where they have units that have a backbone of full-time that is augmented regularly by reservists and I know that other forces around the world operate similar concepts. So I would like to see Air Force evolve its thinking and methodology around those lines as well but as I said we just need to manage all of those things within our resource constraints and so reserve days salaries cost money and so you know we do live in that resource constrained world. So acknowledging those constraints it's actually about utilising the workforce in the most appropriate way is the way I see the problem.

WGCDR J CARROLL: Yeah thank you and of course I understand Chief of Personnel has been doing a lot of work in trying to understand well what does that reserve force look like across the services. Any others?

AVM G BRAZ: I'll have a go. Look I agree with Steve I think there's a lot of ways we can reimagine noting the different ways each of the services in Australia does the reserve issue and I think Air Force has a particular model. I think we do need to be bold and think about different ways to do that. At the end of the day the reserve pool is a strategic and national asset and we need to nurture it, build it and grow it in the right ways and train and exercise it in the right ways for that matter as well.

We saw this during COVID with the medical community as well where we had a bunch of reserve folks who were in the medical system and we couldn't draw them into the reserve medical elements inside the defence force. That was a pretty binary sort of scenario but it's not quite that simple when it comes to a more complex scenario.

It was complex but a more national existential scenario is a different game plan. So you know I think there are people who would be otherwise contributing to defence industry or elsewhere in really important ways for the national effect but we don't, we may not need them all the time. We might need them for a period of time we may have a pool and a bench where we can rotate people through and they can still contribute to that national foundation in their other time. So I think we just need to be smart about it and build it as for what it is a true asset.

WGCDR J CARROLL: So what I'm hearing is very much plan for purpose and build that fighting depth but think of different ways of doing it.

AVM S PESCE: Yeah we should be looking at leveraging our civil workforce better so there's a lot more work we could be doing with recognition of competency frameworks, licensing requirements for maintainers. To me that's actually a good way to leverage off our limited resource pool which is humans in Australia in a way that genuinely supplements our fighting capacity.

WGCDR J CARROLL: Yeah great fantastic questions answers to a great question. We're soon coming to time, there's a shocked look here we can we can see a clock here so you know.

AVM N HOGAN: It's going red.

WGCDR J CARROLL: There are some great questions I might ask each of you to just make some some brief closing remarks but I'll throw in two of our top questions for those who might want to discuss them.

One talks about our security and estate groups model and questioning whether it's supporting efficiency or effectiveness in getting bases ready in crisis or conflict. So perhaps some a perception of some gap between how our bases are being managed and what we need what we're directed to do for preparedness and operations.

And the second is a question about how do we expedite the production of munitions in Australia and would and would we implement the use of drones or UAS in the defence of Australia.

So two big questions if any of you want to comment on them in your closing remarks please feel free. If there's other things you want to say then we can we can do that as well.

AVM S PESCE: So I'll steer away from the SEG related question because I don't really have a desire to get into sort of you know interdepartmental discussions and debates. But with regards to the munition question is part of a broader issue and that is that we just lack the mass to incentivise industry in a way that generates profit for them and builds resilience for us unless we look for novel ways to enter with sort of cooperative arrangements with our partners is the way I would describe it.

So everything comes at a cost so we can certainly store 90 days worth of fuel but that needs to be a priority and we need to be able to invest in that ahead of other things. And so you could pick any particular critical vulnerability within our defence capability and provided we're willing to invest in that capability then we can make that happen.

But you know with any industry they always try and normalise their workforce and workflows so they can keep their workforce employed. We just don't have the mass to be able to surge quickly within our economy. So that's why we're looking for ways to work cooperatively with our partners.

WGCDR J CARROLL: Fantastic. AVM Hogan?

AVM N HOGAN: So mass, resilience, sustainment and preparedness sustainment is sort of key to all areas of that to create that fighting depth. Different ways of working across our organisation we just need to be smarter about the way we do it. Whether it's working with our security and estate group to improve our resilience of our bases there is always opportunities there for us to get after it.

It's just a matter again as Steve had mentioned before about prioritising and we talk about that if not weekly it's almost daily and then amongst ourselves on text as we get through to "Hey how are we going to get after the things that are important in order to support the warfighter on the front edge?".

In terms of autonomy and moving forward in you know longer term there is always again there's opportunities. Low affordable mass is where we want to end up longer term and you can see that play out in the modern conflicts of today.

I'll leave it at that. Thank you

AVM G BRAZ: Quickly Jacinta I don't think there should be any sacred cows about we ask ourselves questions, tough questions across the department about how we do things. We're doing that internal to Air Force and we should encourage that approach everywhere in my view because it's a different context and we need to reframe and reform.

So that's the first one.

In other issues look the team continue to demonstrate that we are up for thinking differently. When we put our minds to things as an Air Force we're really good at finding creative and agile solutions to those. We should back ourselves in that endeavour in my view because we have amazing people and they demonstrate it every day. We've got amazing APS partners, we've got amazing industry partners. There's a lot of things we can do together. We've got amazing international partners for that matter many of which are here with us and thank you again. But yeah it's we are opportunities ours we just need to be brightened and creative enough to seize it and manage risk.

WGCDR J CARROLL: Absolutely well look that thank you so much gentlemen that that brings us to time. Thank you for your questions.

Quickly to note your questions will live on beyond here. We're collating those to make sure that they guide the work that's happening in the Air and Space Power Centre.

I think you'll agree with me that this has been an extraordinary panel discussion. In only 48 minutes we have gone across everything to unpack what building fighting depth in people systems and processes looks like. We've looked at basing, we've looked at munitions, we've looked at UAS, we've looked at people challenges, how do we work across our organisation and with our partners.

We're being led well we're in good hands but you heard it here. Let's reimagine what our Air Force is, reimagine what else our Australian Defence Force is.

Ladies and gentlemen please join me in thanking our fabulous presenters.

GPCAPT J LAROCHE: Thank you Jacinta, thank you gentlemen. What a great panel. They really have challenged us as the audience to be bold in our thinking, in our actions, no sacred cows right sir, and take up that challenge.

So what a great panel. Thank you and thank you to the insightful questions and participation from the audience. Please carry that through into the panel for our closing session today.