

## CALFS PODCAST – SUMMARY OF SESSION 4

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LEON YOUNG: Welcome to the fourth and final podcast on the Chief of Army's Land Forces Seminar where we're covering the fourth session being *The Character of Future Indo-Pacific Land Forces*. We heard from Major General Toohey, Dr Yu Ji, Professor Genevieve Bell and General Robert Brown. I'm not sure about you guys, but I felt that this was the most interesting of all the sessions. It was a very good way to wrap up and particularly how we looked at well, quite the diverse range of speakers.

CATE CARTER: Yeah, I agree! Certainly left the best 'till last and I think some of the meatier topics came out in this one, Leon.

LEON YOUNG: Yeah, that's right. I mean first of all, we had the, the I was going to say 'standard', but it's not really, when we saw a lot of acknowledgment about the change in pace and certainly a couple of good, a good way of describing that - going from the 'black swans' to 'pink flamingos' from General Brown, which is always interesting. Proceeded by Professor Bell who had an extraordinary talk beforehand...

CHARLES KNIGHT: Her introduction, yeah, was great...was amazing.

LEON YOUNG: ...and I think what we saw come through for most of the talks and and it was especially pleasing to hear from General Toohey was that while, and I quote her, '*while tech is a focal point, it is not an end, but it is an enabler*'. Did you guys hear that?

LYNDAL THOMPSON: Absolutely.

CHARLES KNIGHT: Yeah. It was, it was very much, it was about the people and the issues... her message was it... the problem isn't the platforms and the systems, but it's getting to the point where your people can use those platforms and systems and essentially, I heard it as a discussion or leading towards a question about education, although that word wasn't used.

LEON YOUNG: Yeah, and I think we'll finish up this podcast talking about the education piece, so I think that's very important and I think we should remember that as a theme going through today's session. Because the previous sessions were very much about... we heard a lot about trust and that was echoed again today; but, but today, I saw the two main themes coming out: one was about the complexity of the world and a little bit more detail particular from the technical side of it - how that, how that's changing and what that means to us. When you hear Professor Bell's description of the 'fourth wave' with artificial intelligence and what that does and does not mean, that was a fantastic description by the way. But yeah, to Kath Toohey, starting off by talking about, you know, some of her top, top technologies that she's covering and one of those being the robotic and autonomous systems.

LYNDAL THOMPSON: And something that I think Genevieve Bell brought to the conversation is...we've heard a lot of '*we've got tech we're going to have, you know, the velocity of information and the dissemination of information is really quick*', and what Genevieve brought to it is an example of one of the future technologies, and all the considerations we have to think about. It wasn't just '*oh, it's a technology - we must use it - accelerated warfare*' etc it was well '*yes, we've got this tech coming through, so what do we need to think about before we adopt? before we deploy it? before we program it?*' and I think that was really powerful when we've heard so much about the tech and adaptability and all those sorts of things.

3:24

CATE CARTER: I think the focus through talking about these really difficult technical issues was that the, the sessions have come from looking at the the, the big scale kind of joint force - land forces in an army - big exercises - unit level things, and they've really come back to the individual in this session (and we're going to talk about education later), but Kath Toohey talked about looking at specialisation versus generalisation; people started to talk about ethics; people start to talk about how we thrive in an environment of ambiguity and chaos and how it was up to the human dimension and the human dimension really came out in this session.

LEON YOUNG: Yeah, and Kath Toohey particularly said '*it's about claiming the cognitive space now - not just a geographic space*' which I thought was quite, quite a pivotal moment within her talk, and she concluded by also, you know, on that same note talking about that '*Army needed creative and divergent thinkers where disruption and risk-taking must be encouraged*'.

CHARLES KNIGHT: I was encouraged to hear her say that, but I... but I'd, I think there's an interesting question about the, the change of culture that was needed, because she talked about media technologies and there was a theme that was, could have returned to later. And, and this is the struggle - to operate in an information environment, and I... and General Brown said you know, there's a problem of '*we've got the whole world is connected by personal media*' media and you...we saw some diagrams that demonstrated *just* how that had changed, but we have a problem because the truth, to quote him, '*the truth takes more time*' and we as an organisation are very, very concerned with being on the official message and, and maintaining truth. But that means that the opposition is going to get the message out first, and really that, that 'dead cat' landed on the table and didn't get explored.

5:25

LEON YOUNG: Yeah, it's a shame. I think the quote was '*a lie gets halfway around the world while truth is putting his pants on*', which is, we say that so often, and it's particularly true, I guess, when we just briefly touch onto Professor's Yu's discussion which was more about a geographic - almost a geopolitical discussion. He, that's where he really differed from the other three I thought, in that he was really examining the Indo-Pacific in, through the lenses of both China and India as the two great powers in that area, in that conflict that they will ensue, and, and really treating the remainders, particularly the US as well as a player but on the periphery in this stage. I thought that was fascinating.

CHARLES KNIGHT: And it was fascinating to have a Chinese academic taking essentially a realist perspective and so yeah, 'this is how it is, and yes, we know, we're reading the... what the, first of all, the Americans are saying in their doctrine, and and we are constant...or China is constantly responding to that.

LEON YOUNG: Yes, right. China... and I wrote down - I'm just paraphrasing what he was saying, but China and Russia are *responding* to US pressure in the Indo-Pacific rather than initiating pressure. Um, you know, I think that's questionable...

CHARLES KNIGHT: ...but it's, but it's really important to hear it from the other side.

LEON YOUNG: Well absolutely, and it comes down to perception as we saw yesterday in yesterday's sessions about how we understand truth and how are we portray ourselves and frame ourselves.

6:42

CHARLES KNIGHT: And one of the quotes I thought was really quite interesting, he, he described the Chinese amphibious capability as '*heading towards the equivalents of what the Americans had during World War Two*' - you know in other words, way beyond what they've got now. So that was, it was a real, I sort of said 'okay'... and he did, he did reference it into, I think he said the Taiwan Sea, so it was kind of clear way - the subtext was interesting, but it was right out there and I thought that was fascinating.

CATE CARTER: And it was interesting to hear his perspective of what the Quad - other Quad nations were doing. So, you know, I've taken this perspective from the south, and, and it was interesting to see his perspective, in particular, on Australia. So he said that our priorities were to *keep fighting the war on terror* as the first priority, *have a greater Asian defence presence* and *closer AS/US ties*, so that was interesting to see that.

LEON YOUNG: Yeah, and particularly to see - just to remind [us] of the viewpoint from, from the north looking south... it is absolutely critical that we must understand that sort of viewpoint and see what, you know, what sort of view they're seeing through their window, when, as he went through the list of... India is shifting its focus from Pakistan to China, so all of a sudden, you know, the guns are pointing the other way. The US have identified China - explicitly identified China and Russia as a primary target. Now Japan are shifting the defence from the north v Russia down to the south. And you had the emergence, the re-emergence of the Quad in the importance, and then of course down, down our way, we've got Australia increasing its influence and presence in Asia when it used to be quite elsewhere. So it's actually - well I thought it was fascinating to see that as a reminder of that sort of perspective. But I also liked, I guess, flipping on to Professor Bell's talk, you know, a fantastic and really interesting start about culture as a good example of Australian culture which I highly encourage everyone to have a look at. But when she moved on to AI, her quote saying that '*AI is the next Magic Bullet*' I thought it just epitomised a lot of talk we're hearing at the moment, so...

8:47

CHARLES KNIGHT: But her tongue was firmly in her cheek when she was saying it! But it was an interesting slant.

CATE CARTER: Yeah, I thought she filled the gaps in our knowledge about what, what the limitations were on AI and, and how that it had to be a process to a solution - not the solution itself, and how, you know, the considerations of all the questions - the tests really - of how it's going to be applied, and the importance of framing the question. I found that incredibly informative.

CHARLES KNIGHT: And she offered a definition, or the structure of a definition, of what AI is, and I think that's... it's worth just listening to her presentation recording - just for that. For me it was very helpful.

LEON YOUNG: And I think it also broadened our understanding of the implications because she, she referred to that, I think, it's the world Economic Forum report I think it might have been? where we're talking about the four different waves of, I guess, revolution or industry change and we're looking at the fourth wave at the moment where it's the cyber and...

LYNDAL YOUNG: I think she said, 'age of intelligence'.

LEON YOUNG: Age of intelligence – fantastic! and the thing about that is understanding the implications that – we're at the start of it, you know, barely stepping over the threshold; and then looking at all the previous ages or the changes that occurred, not just in the industry itself but also in the legal practices. In the way we... in our own personal, in our national cultures and the way we do things - it has such a vast implication on how we do business. An example that she provided about even just thinking about tendering in 10 to 15 years, when we want to tender for the next infantry fighting vehicle or the next platform or whatever it might be, which is going to be intrinsically linked to, not only, the system and the algorithms internal to it, but also the data that's attached to it. So how do you include that in the tender? How do you stipulate where that data comes from? how do you stipulate where their learning algorithm comes from? and how is it grown? do we grow it ourselves? Or do we make someone else grow it?

CHARLES KNIGHT: I mean, we're sort of aware of that at some, some lower level. We know it's not a great idea to buy computers from a, from a country to our north and then use them in Defence because there's, there's an awareness of capture and so on; but she talked about a much deeper thing which is the artificial intelligence which will make decisions, the basis on which it will make its decisions may be constructed by somebody else. And that links to what she had to say about that culture and ethics and should decisions come from...are unique to a particular culture? So a good example is if we're buying an American autonomous or semi-autonomous fighting system, it may well...as a default it will presumably come with American set of values. That's a really interesting idea.

CATE CARTER: Yeah I found that very interesting, because it was basically putting a conceptual framework on our, once again, our action-biased processes where we like to acquire and then integrate, and so this is looking at pre-design and thought into how we actually acquire equipment and, so that we don't have the massive integration battles that we have afterwards.

LEON YOUNG: Yeah. Exactly right. So Charles...

CHARLES KNIGHT: Yeah, I think the other thing I found really helpful was that she unpacked something. So she, she looked at where the intersection with ethics and, and artificial intelligence, and sort of said, look, okay - notions about you know - what is autonomy? and where does autonomy fit in this the idea of agency? and whether it's explicit or tacit. And what are the rules that are going to operate within a system? and how we assure this? so these, I know... so go and have a look, because it really is helpful to unpack and analyse the problem that we thought we can broadly recognise, but she's showing us, you know, a way to understand a little better. I thought it was very helpful.

12:40

LEON YOUNG: Yeah well, I think what I found very useful in this presentation, I guess, was not only the presentation itself, but also how it led into some really interesting – one of the most interesting question times I think I've seen in this conference, particularly when they started talking about - the question from the floor was 'how to better prepare through training and education?' which we know are quite, two very different things. And the responses we got both, particularly from Professor Bell and from General Brown, and one that... the top point was teaching how to think.

LYNDAL THOMPSON: Yep, well because I think what Genevieve's talk did, is actually point out the human centred nature of technology, and part of that is the education and training, and it was really - really interesting to hear General Brown actually talk about the inroads that America has already been making as to how they train their staff, and actually applying the idea of professionalism, critical thinking and I don't know, perhaps they're ahead of us in that regard.

13:45

LEON YOUNG: Yeah, maybe. I mean, certainly there's a lot of movement that I'm seeing in our own professional military education curricula, and platforms where there's a lot of movement in, I think, in the positive way. So I saw it, certainly in the responses both about the education piece, but also *more* than that, it was about – there are three points here: one was *recruiting the right type of people to start with*, so making sure that everybody's not going through the cookie cutter at the start to, you know, shape everyone to be exactly the same. The next one was *teaching how to ask the right questions* - was more important than often the answer; And then the last one, which I would like to hear your views on, is *how we can develop leaders who can manage through conflict*. Particularly when he talks about diversity of teams rather than having the team of the same or homogenous teams that we...

CHARLES KNIGHT: I think I want to unpack an idea that came out there a little more. So Genevieve was talking about how management or leadership had been operating in Silicon Valley, and the recognition that for a... in a creative environment you actually needed, you needed leaders who were prepared, who were prepared to take their teams through and accept and use conflict within the, within the working group, rather than trying to crush it, quash it, get rid of it, avoid it, whatever; and seeing that conflict was in essential as part of the creative process. That was a really different idea to me.

15:15

LEON YOUNG: Absolutely, but I also wonder how that maps against our idea of when you're in the frontline, conducting the fight where you want everyone on the same sheet of music, so to speak, and you don't actually want that conflict as a leader. And I wonder how that that idea of managing through conflicts with diversity - does it actually map to that, I guess, that stereotype?

CHARLES KNIGHT: I think there's a connection that relates to the question of mission command, and under what circumstances do you divert from a plan? there's a conversation... and I guess the message is, it's going to get harder in this space.

LEON YOUNG: Absolutely.

CATE CARTER: I was interested in how that line went down the, the training continuum and the way that we, the way that we train and the way that we indoctrinate, against the need for specialists versus generalists - so another contradiction that we find exists in our Army. And there was a lot of talk - I was encouraged by General Brown's insights into diversifying the influences that come into the military - so make sure there's lots of external military people who, who teach at your academies and influence your thought; but he did hit the nail on the head when he said 'you've got to start at recruiting'. And so if we have, you know, if we have a fairly homogeneous force from 'day one' of joining the armed force, then it's going to be much harder to change the group think that ends up at, you know, O6 level; so, so perhaps the idea of incorporating specialists *with* generalists will allow different kind of ways of thinking to exist with standardised ways of thinking.

16:52

LEON YOUNG: Absolutely, and I often consider perhaps, that it's not the homogenisation at the start it's the homogenisation that occurs through the common training that we all have to experience rather than understand that different training requirements for different positions, which then also creates its own diversity. I guess I just... I found that an absolutely fascinating session and it really, for me, wrapped up this whole conference, particularly when we talk about 'trust', which you know, the last three were really about trust - about building relationships but I think where General Brown finished his talk on, I think, three points or almost an action - a call for action of 'how do we do this, you know, how we build it? Well, he talked about, you know, when we go with this - a much more complex sort of environment, that there's, I guess, in order - three things that you need to do. First of all, *there is building trust*; we talk about that. Next is *building teams* - what do those teams look like? we need to understand the diversity that is required, and finally, as we saw from a lot of the speakers today - *empowering those teams*.