

INTEGRATING AIR FORCE – PLAN JERICHO

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As the Chief of Air Force said this morning, we are committed to integrating our Air Force and taking the lead role in the development of integrated airpower concepts and tactics that will, over time, transform how we conduct and sustain air operations.

Field Marshal Montgomery is said to have commented that *'Air power is indivisible. If you split it up into compartments, you merely pull it to pieces and destroy its greatest asset - its flexibility.'*

Montgomery got it. CAF gets it. I get it. Air Force gets it. New generation systems are enabling a unity and coherency in air operations in ways that are both new, but also profound. Ways that challenge air men and women to fully exploit the promises of networked air systems. To induct, normalise and manage these systems, we are putting in place a Transformation Plan to make sure we can exploit them early and comprehensively.

That Plan is Jericho.

Under Plan Jericho we will fully integrate our Air Force and we will do it, in its initial form, in less than ten years. Within ten years we will have transformed into a networked, fifth generation enabled force that can respond to Government demands more quickly and comprehensively than any other military option at their disposal. We will find better ways to treat emerging threats and we will find better ways to acquire, sustain and exploit our force.

We will give Army and Navy the most potent and connected air power effects seen in our nation's history.

UK writer and scholar, Max McKeown got it right when he said that *'Adaptability is about the powerful difference between adapting to cope and adapting to win.'*

Our Air Force will adapt to win. We will take a fleet of the finest aircraft we have ever had, and through their intrinsic design and their superb connectivity we will learn how to extract every last bit of combat effect from them, and between them. Whether we are fighting as a joint force or as a coalition partner, across the spectrum of operations, we intend to remain formidable into the future.

We will integrate our Air Force because the effectiveness of our combat capability depends on it. We cannot ignore contemporary emerging geo-strategic circumstances that on the one hand hark back to the Cold War and large-power tensions, but in some ways also reflect non-state adversaries as the norm. As previous speakers have stated, our world remains unpredictable.

Given the uncertainty around the nature of any future conflict, we must be an Air Force that is not only better integrated, but also more flexible and robustly adaptable. Flexibility means we will learn to use our people, aircraft, ground systems and the information that flows between them. Adaptability means we will practically review and test our Concept of Operations so that we can change our systems, skills and support structures as and when the need demands.

Networked systems permit 'on-mission adaption' through operational design, with airmen being able to dynamically change the mission outcomes from the tactical to strategic while on-station.

To meet our own and Government's expectations of a multi-billion dollar investment in networked systems we have a powerful vision for Air Force and Plan Jericho will be the mechanism to make our vision a reality. So let me tell you a little more about what Jericho will mean for the Air Force and what it will mean for the ADF.

When CAF announced Jericho this morning, he spoke about the three themes that are central to our transformation.

First, we will harness the combat potential of a fully integrated force.

Imagine ten years from now, a scenario in which one of our regional neighbours comes under attack from a state backed rebel force. The force has captured a key airfield. The rebels are well armed, well supported and want to use the airfield as a staging point for expanded operations. They have modern short range ground based air defence capabilities and are well trained. The Local Government has asked for our support

Triton aircraft are re-tasked to collect imagery of rebel positions in and around the airfield. An hour after Triton gets first images to the ground based processing, exploitation and dissemination centre, called DGS-AUS, the Wedgetail is en-route, Growler and JSF Intelligence Mission Data loads are updated and they will receive in-flight updates of exploited Triton and Wedgetail information.

While the strike package is still en-route with the support of air to air refuelers, a C-17 takes off loaded with a ground force insertion team. The team watch real time video of the airfield and updated briefing packages developed by SOCOM and our air battle managers based upon exploited imagery and signals intelligence provided through DGS-AUS.

Growler, JSF, Triton and Wedgetail exchange on board sensor information over data link and feed the combined picture at Joint Operations Command. Updates to the rebels' Order of Battle and electronic signatures are shared and adjustments to timings and tactics made. The insertion team refine their assault plan, coordinate with friendly ground forces and egress the C17 with up to date targeting objectives.

Within a day, the airfield is back under local Government control and secured. Why could it go so well? Because AF not only operates superb equipment, we have learnt to operate it superbly. This was not the first time this ADF team had flown a mission of this kind. Live, Virtual and Constructive training events had been tested in the years before this particular mission using TTPs developed through the application of a robust experimentation program and through investment in education and training for the key enablers.

This was clearly a simple scenario, however it might give you a feel for the way integration and the speed of information exchange can magnify the speed and effectiveness of a military response. It also shows how integration might give you greater survivability and lethality. The combat potential of a fully integrated force is enormous and we will harness that potential.

We will develop new concepts for projecting and exploiting air and space power. We have already drafted a Future Air and Space Operating Concept or FASOC and we will create a classified Concept of Operations. Together, these concept documents will drive our R&D effort, force structure design and integration frameworks. They will also drive many of the Jericho implementation initiatives.

We will continue to develop these concepts through interaction with the other services and joint agencies, and by engaging with leading air power practitioners including academia and think tanks like ASPI, IFRS and the Williams Foundation. We must also leverage off industry experience and industry speed of innovation as we develop these concepts.

We will consider new technologies and paradigms like 'combat clouds' and 'internet of things' and we will determine how fifth generation technologies can seamlessly integrate with gen 4 or 4.5 and continue to leverage off the great work being done by DSTO.

We will learn how to evolve our concepts and fighting tactics by using simulation and experimentation. Live, virtual and constructive training will become the norm and a greater number of ADF components will have the opportunity to train together more often.

Our command and control processes must mature and our operational commanders must learn how to fight within an integrated force. They will learn when to reach in to the tactical level and when to stay well away. They will have

confidence that the information they are using is valid. They will not be drowned by an ocean of information, but will thrive in it.

I said we will become an integrated force within ten years, but I am really pleased to say that we have already started making changes.

We already have an interim DGS-AUS capability in place which is connected to the USAF DGS-5 in Hawaii. This enables us to conduct processing, exploitation and dissemination of ISR information and provide that exploited information to the strategic, operational and tactical level commanders. DGS-AUS has already allowed us to start operating our Heron UAS in new ways and we have recently demonstrated the ability to conduct 'reach-back' ISR exploitation between Heron and DGS-AUS.

Air Mobility Group have introduced new systems on board the C-130J and C-17 that allow them to connect to C2 and ISR infrastructure and they will soon be able to provide in-flight information updates to embarked forces en-route to their destination or insertion point.

DGS-AUS, Heron and AMG aircraft will now be connected more than ever and under Plan Jericho we will conduct a live demonstration of this integrated capability in May this year.

The **Second** Jericho theme is also about unlocking potential. By developing an innovative and empowered workforce, we are unlocking the vast potential of our most important capability – our people.

Australia has some of the most talented and motivated individuals in the world. Air Force has a recruiting strategy to attract as many of those people as possible and we will need a contemporary working environment to be successful long term.

We must do more to tap into that talent and empower our people.

We will harness the motivation and imagination of our senior Flight Lieutenants, Squadron Leaders and Wing Commanders. We will draw on the innovation and technical knowledge of our Corporals, Sergeants and Flight Sergeants. In loosening the shackles of control and re-empowering our people, I have no doubt that our workforce will, as General Patton put it, '*surprise us with their ingenuity*'.

We will instil a culture of disciplined innovation and this is also where I think industry can help us. Not only with innovative technical solutions but also with innovative training solutions.

An example is the USAFs Education with Industry Program. This program gives selected airmen and women the opportunity to spend ten months working with aerospace partners and uses a hands-on educational experience to provide airmen with management skills and technical expertise as they study best practices with industry leaders. Immersing some of our Air Force people into a civilian work structure will help break down some of the artificial barriers between us and will fuel innovation for the collective good.

Air Force is evolving. We are trying to grow cyber specialists, ISR specialists, UAS specialists and EW specialists. But if you were to look on the recruiting web-site, you won't find any of these names to describe our workforce. We will develop trade structures that reflect the needs of a modern, integrated Air Force. We will re-visit entry requirements and training models to better meet our contemporary needs.

Plan Jericho will drive change in our workforce structures so that we can continue to recruit, train and develop the right people with the right skills and give them satisfying career paths.

The Chief's announcement this morning of an Air Warfare Centre represents a focussed opportunity for Air Force to unlock the potential of our people.

An Air Warfare Centre will have the benefit of producing strategies, concepts and tactics that are integrated at birth. It will allow us to test our force structure against existing and emerging Concepts of Operations and higher level 'O' Plans in a much more integrated and coordinated way. It will allow great ideas to flow into the capability development cycle more quickly.

I can see a time where the Air Warfare Centre becomes a place where our best and brightest are constantly developing new ways to use Air Power in the joint fight. A place where those same people have the authority to evolve those ideas in a robust live and virtual operational test and evaluation environment. A place that shapes how we fight. It will be a place of Air Warfare excellence and a place not only occupied by Air Force, but importantly a place people ask to be posted to.

As the Chief mentioned, we have already started progressing the Air Warfare Centre and Commander AOSG and his team have started developing plans to complete the roll out by 2020.

The **Third** and, perhaps most controversial theme of Jericho will address the need to change the way we acquire and sustain capabilities.

Our ability to succeed in the conduct of the mission I described earlier is predicated on our ability to field integrated enablers quickly.

Our acquisition and sustainment processes must keep pace with technology and the uptake of the same technologies by our potential adversaries. Quite frankly, 'Kinnaird and Mortimer's Law' is being beaten hands down by 'Moore's Law'. While the Kinnaird and Mortimer principles are valid in major acquisition programs, we have become weighed down by layers of risk mitigation designed to prevent poor performance but often having the opposite effect. While I would anticipate that the First Principles Review of Defence will provide reform opportunities to our acquisition processes, Air Force needs to be prepared to continue agitating for a capability development construct that services a 21st century information age force. Plan Jericho will provide the impetus behind Air Force's ongoing push for effective change in this area.

We have already driven some progress in terms of capability development aligned with Plan Jericho. For example, new SATCOM and Link 16 systems have been introduced onto AMG aircraft in short time by aggressively using the Air Force Minors Program. No shortcuts, fully accountable and delivered on budget and on time.

Air Force will continue to identify opportunities of this nature under Plan Jericho while simultaneously designing and testing long term initiatives consistent with our overarching strategy.

Technology changes quickly and we must keep up. Therefore, it is not only our acquisition program that needs to change. Our sustainment options might also benefit from a contemporary adjustment. Wherever possible, we should look to use sustainment funds not acquisition funds to replace hardware and software that become obsolete.

This does not mean we will replace whole aircraft systems with sustainment funds. It does mean we will replace old processors and software. It might mean we will replace critical enabling infrastructure using sustainment funds.

Our sustainment processes must be robust and enable the levels of mission assurance, responsiveness and adaptability that we have come to expect from new platforms and systems. Terms like spiral development and tech refresh will become a part of the sustainment lexicon if we are to continue delivering the levels of Air Power capability demanded by Government.

We must re-think how we champion the enablers. Few disagree that enabling capabilities are fundamental to operational effectiveness and this is becoming increasingly so. We must therefore find a way to put enablers near the top of capability priority lists, not near the bottom.

Air Force will be their champion. We will work closely with other Defence groups to give the enabling projects the appropriate priority and taking on the role of Project Realisation Manager for JP 2096 is our first example.

For a long time we have talked about a balanced force without including enablers in the balance mix. That needs to change.

Does that mean we would prioritise an ISR network over a single aircraft? Does it mean that we would fund the 'combat cloud' now and delay an infrastructure project? It might.

CAF, the Air Commander and I recognise the breadth of opportunity missed, and its gravity, if Jericho does not deliver the Air Force intent.

We have pulled together a Jericho team that have a history of innovative thinking and delivering outcomes. The Jericho team is led by two Group Captains – a pilot with a fast jet background and an ACO with an ISR background. We have two Wing Commanders with experience in integrated operations and enabling systems. We also have a Warrant Officer with an operational and technical background in developing the recognised air picture for the ADF.

This team works directly to me and the Air Commander to develop the Jericho Plan and coordinate the subordinate implementation plans.

In doing so, they will be consulting broadly across Defence and particularly with our sister Services. They will be consulting with our allies and of course, they will be consulting with industry.

They are here this week – all week – to listen to you and discuss opportunities.

We will pursue the Jericho themes with vigour.

We will adapt to win.

We will remain indivisible.

We will remain flexible.

Plan Jericho is the transformation of the Royal Australian Air Force.