

**REMARKS BY CHIEF OF AIR FORCE
AIR MARSHAL GEOFF BROWN, AO
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It has already been a wonderful week here at Avalon. Earlier in the week, Air Force rolled out Plan JERICHO, our transformation vision to set our vector as we become a 5th generation – enabled force. Jericho meets the dual challenges of geo-political uncertainty and rapid technological change.

We are in the midst of a period of profound reappraisal of Australia's security environment in rapidly evolving global security order, which will demand transformational change from all of us. This year will see the release of another Defence White Paper—informed by a first principles review—as well as an updated Defence Capability Plan and the release of an industry policy.

The cumulative effect of all of these will be to shape the Air Force, and the ADF, well into the fourth decade of this century. All of you will be keen to assess their impact on your bottom line and the longer-term profitability of your businesses. It is vital that we harness the latest technological innovation to develop forces that are aligned to the evolving threat environment. Secondly, we must adapt our culture organisations and intellectual mindset so as to ensure that our forces are postured for the geo-political context in which they are likely to be employed.

We already face complex, simultaneous and multiple challenges. One only has to consider the multiple challenges to which the Air Force responded over the past 12 months to acknowledge that. In that time, we have responded with speed, precision and a carefully calibrated mix of capabilities to a search for a missing aircraft in the most remote part of the world. We have deployed across the world to repatriate the bodies of Australians killed over the Ukraine and we have dispatched a potent, entirely self-contained air task group to undertake sustained combat operations in a Coalition setting in the Middle East.

Most strategic analysts agree that the pace of globalisation and commercialisation will intensify. One effect of this is to place even greater pressure on governments in the advanced nations to reduce their budgets and their call on the savings of their citizens. All western governments—including our own—are under sustained fiscal pressure. The perennial attempt to find the appropriate balance between 'guns and butter' is relentless. You only need to read the newspaper any day to understand that this imperative will shape our national security decision-making for the foreseeable future. Austerity is the new normal. This simply must ultimately impact on defence budgets at a time when substantial components of our force are ending their working life.

Likewise, technological change is imposing its own imperatives on the direction and scope of military modernisation. As an airman, I feel this more acutely than my colleagues. There is a celebrated quote attributed to General George C Kenney, to the effect that 'second best air forces are like second best poker hands—they cost you a

lot but get you nothing'. As we enter the era of 5th generation technology, those words retain their resonance. Air forces, even more so than other forces, must be at the vanguard of technological change. Fortunately, successive Australian governments have made, and sustained, the commitment to take Australia into the realm of 5th generation air power. This will give us a distinct operational edge out to 2030 and beyond.

Today, I will reinforce some of my hope for Plan JERICHO as the transformation blueprint to facilitate the changes required of Air Force, the ADF and our industry partners in an era of information proliferation and 5th generation air power. The good news is that we are already at the cutting edge of the employment of air and space effects in real-time on demanding operations. A couple of examples from our current operations will illustrate my point.

There is no audit of air force effectiveness as exacting as war. And our performance in Operation OKRA confirms we are getting the fundamentals right. The rate of effort of our aircraft, in very demanding conditions, has been impressive. As you all know, while the aircraft and aircrew are the tip of the spear, their ability to sustain operations in an austere environment, to find targets and to release functioning munitions on to their assigned targets, represent the culmination of a sophisticated system of training, supply and sustainment. A successful strike is the product of an enormous number of people getting their jobs right. I was delighted to be able to visit our deployed force elements around Christmas. Indeed, I flew a sortie with one of our Wedgetail crews, which really enhanced my situational awareness as to how we are supporting operations in that theatre. The data detailing the key metrics of our performance during Operation OKRA provides powerful testament as to the professionalism of our people.

The following data confirms that conclusion. In just over 130 days, the Super Hornets have flown more 2600 hours, which means that over 10 per cent of the Super Hornet hours flown since they arrived in Australia are combat hours. We have only flown 22 000 hours since they came into service way back in 2011. The Super Hornets have struck over 100 targets with GBU-12 laser-guided weapons and GBU-38 GPS-guided weapons. As you know, every weapon on a target marks the culmination of the efforts of a highly trained, tight-knit team. And we have successfully engaged every target allocated to us. The average length of a mission is between eight and ten hours, and most missions are conducted over 1000 to 1200 nautical miles from home base. Usual missions are two to four aircraft either on deliberate strike or close air support of Kurdish or ISF forces. Mission success rates exceed 98 per cent. Let me place on the record our appreciation for the impressive support from our contract partners, which underpins that operational excellence.

A single Wedgetail has flown over 800 hours, featuring a success rate in excess of 93 per cent, making us—again—the envy of our allies. The aircraft is operating in Northern Iraq and controlling all operations in Syria and Iraq. The normal mission is 12 hours, although it has been extended a number of times and now has one of the longest recorded flights by an Australian AWAC platform at over 16 hours, and the longest time airborne by any B737 variant. Again, our contract partners and AEW&C System Project Office were critical in fast tracking the fitting of MircChat, which is a

secure command and control (C2) chat system that is critical to operations in the Middle East.

The Wedgetail is recognized as the preferred C2 platform for the more complex missions. It usually coordinates more than 70 aircraft, controlling all aspects of airspace battle management from the air-to-air refuelling ladder to detailed strike coordination with coalition Joint Terminal Attack Controllers (JTACs) supporting Iraqi Security Forces on the ground. In addition, it monitors Syrian Air Force missions and guards coalition big-wing ISR and refuelling aircraft against the potential threat of interception by Syrian aircraft.

The KC-30 tanker has flown over 1200 hours at 97 percent mission success rate (we only did 2000 hours total last year with them) and offloaded more than 13,000,000 lbs of fuel. It went over to the Middle East only qualified to refuel Australian Super and Classic F/A-18s—and has tanked all US Navy aircraft, including USMC Prowlers and AV-8Bs, as well Canadian Hornets, French Rafale and Saudi and RAF Typhoons. The single KC-30 tanker often flies two 5-hour missions a day.

That snapshot should demonstrate that we are operating at a high tempo in demanding conditions. As I said, we have passed a tough examination, though it must be conceded that the ground based air defence system is rudimentary and we are able to operate at a floor that would not be possible against a credible peer opponent. But few air forces in the world could assemble a package as balanced and potent as that which we have deployed on Operation OKRA. It reflects extremely well on Air Force and indeed on the whole ADF.

Yet we cannot rest on our laurels. Operations against non-state actors are not the most demanding ones which we must be prepared to prosecute. I endorse the conclusion of my colleague Air Chief Marshal Sir Andy Pulford—Chief of the Air Staff—that we need to transition from an era of low intensity campaigning to an era of contingency, in which we may have to respond rapidly across the entire spectrum of air power tasks—from delivering humanitarian assistance through to defeating air incursions with little warning. I also adhere to the view that we are likely to be entering a period of increased likelihood of traditional state on state conflict in which the reach, and strategic weight, of air power will constitute the cornerstone of our conventional defence and deterrence.

Like all of you, I am excited at the imminent introduction to service of the Joint Strike Fighter. This will mark a new era in the history of both Air Force and the entire ADF. I formally launched Plan JERICHO this week and I trust most of you are aware of its broad outline. It should be obvious that our industry partners must contribute to our vital modernisation vision. We simply cannot achieve transformation without you.

Obviously, it is tempting for industry to see the introduction of the fleet of 72 aircraft, configured into three operational squadrons, as a potential bonanza. However, I want to caution you against cargo-cult thinking. The acquisition of JSF will not be a financial windfall unless we are all able to maximise its performance and break down the cultural and technical walls that impair optimum exploitation of the system. I am also sounding this same note of caution to Air Force in order to dispel any complacent assumption that this weapon provides a panacea, and all that we need to do is train our

airmen to fly it and we will automatically attain regional supremacy. It is not that simple—but nothing worthwhile ever is.

The point, which I intend to hammer home in my remaining time as Chief, is that the F-35 replaces *nothing*. But, employed to its capacity, it changes *everything*. This remarkable aircraft is not a replacement for the Classic Hornet or the Super Hornet—it is a transformational weapons system, whose array of sensors and weapons draw no distinction between kinetic and electronic strike, and reconnaissance missions.

In the Information Age, if you cannot break down stovepipes between multiple inputs you can drown in your own information. Information never matures into intelligence but remains raw, voluminous data. Our adaptation with Vigilaire and the links between Navy and Wedgetail offer a useful template for us to build on in order to maximise the effects offered by JSF to our joint partners. The F-35 can credibly be described as the ‘smartest’ aircraft to have ever flown. The greatest risk we face as we introduce this formidable capability is that we succumb to ‘platform replacement’ thinking and continue to operate it within our comfort zone as a slightly more sophisticated Hornet.

I am happy with the broad vector of Air Force modernisation, especially our efforts to iron out any residual technical issues with JSF in concert with our commercial and alliance partners. But the truly transformative impact of JSF will only be achieved if we align our people and the other enabling elements of our force with it. This will entail an overhaul of how we raise train and sustain the force. Some trade skills may become obsolete while others will emerge. We will need to be far less stove-piped inside Air Force but likewise right across the ADF and Defence. This is not the forum to discuss the full potential of the JSF, but we need to break down cultural and technical walls dividing us from key agencies of the Australian intelligence community, notably the Australian Signals Directorate and the Australian Geospatial-Intelligence Organisation.

You will note that I have mentioned breaking down walls between different parts of our organisation. I use that term quite deliberately and it inspired my choice of the title Plan JERICHO for my vision for a 5th generation air force. At present, all of us are too stove-piped—Air Force included. But our entire capability development and procurement system is lethargic and unresponsive. That has important implications for all of our industry partners as well. Over time we have developed a compliance rather than a governance mindset. Project AIR5428 generated over 3600 pages of specifications. No doubt they were all well intentioned and implemented by good people. But in the dynamic era of rapid advances in information technology, stealth and robotics, can we maintain our winning edge and still pay homage to these sacred cows?

Increasingly, the ADF must rely on the timely, intuitive and seamless support of a vast array of contractors and experts especially from among small and medium enterprises. The walls between parts of Air Force, between the Services and between the Defence Department and the corporate sector simply *must* come down.

In closing I would like to thank you for your support to Air Force. I welcome your questions.