

# AIR FORCE STRATEGY 2017-2027



ROYAL AUSTRALIAN AIR FORCE



*The Royal Australian Air Force will become a fifth-generation Air Force.*

*A fifth-generation Air Force is a fully-networked force that exploits the combat-multiplier effects of a readily available, integrated and shared battlespace picture to deliver lethal and non-lethal air power.*

*A fifth-generation Air Force will provide the joint and networked effects necessary to prevail against the increasingly complex and lethal threats of warfare in the Information Age.*



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## FOREWORD

Welcome to the *Air Force Strategy 2017-2027*.

The *Air Force Strategy* outlines a set of strategic change vectors that will shape how Air Force will transform to a fifth-generation force over the next decade and beyond—a period of increasing strategic uncertainty, rapid change and complex operational challenges.

This strategy focuses primarily on those key areas we must change in order to ensure Air Force's continued growth as a modern and effective force capable of undertaking regional and global operations as part of a genuinely joint Australian Defence Force (ADF). The strategy does not address those areas important to Air Force that do not require significant change, such as the continuing need for professionalism, technical mastery and adherence to Air Force values. Such constants provide the foundation on which our transformation to a fifth-generation fighting force will be based.

Air Force has demonstrated operational excellence in recent operations such as *Okra* in Iraq and Syria but we cannot afford to become complacent. We must continue the transformational work started by Plan *Jericho*, which we will continue to its planned conclusion. The *Air Force Strategy* will ensure that the *Jericho* culture of innovation, integration and 'jointness' will continue to shape the Air Force beyond the life of Plan *Jericho*.

While the main purpose of the strategy is to guide Air Force's transformation by providing decision-makers with the high-level guidance necessary for ensuring coherence of purpose and the best use of available resources, the strategy also has an important secondary purpose.

Air Force's future success depends on being a valued and effective part of a much more joint ADF, and of 'One Defence' more broadly. For this reason, the strategy explains how Air Force will contribute to the larger Defence change journey. This transparency is important for building and strengthening mutually beneficial relationships with Defence's other Groups and Services, Government, industry partners and international allies.

The *Air Force Strategy* will place significant emphasis on people during its implementation. This is deliberate because our people are just as important to our warfighting effectiveness as are our technical capabilities. Our success in developing our technical capabilities has not always been matched by how well we have developed our workforce. Air Force must place greater emphasis on ensuring our people are able to exploit the full potential of our future platforms and systems. This requirement will extend to our leaders becoming adept practitioners of operational art in the Information Age.

Finally, the successful implementation of the *Air Force Strategy* will depend on good two-way communications within Air Force. Leaders at all levels will need to explain clearly where Air Force is heading and all members must be able to offer their ideas on how we might get there. Put simply, all of us have a role in Air Force's transformation.

I commend the *Air Force Strategy 2017-2027* to you and look forward to the next stage of Air Force's transformation.



Leo Davies, AO, CSC  
Air Marshal  
Chief of Air Force



## EXECUTIVE SUMMARY

### Towards Fifth-Generation

*The Royal Australian Air Force will become a fifth-generation Air Force.*

Air Force's strategy for transforming to a fifth-generation force over the period 2017-2027 is fully aligned with the integrated 'One Defence' model and will be pursued through the following five vectors:

#### **Vector One – Joint Warfighting Capability.**

Integrate Air Force's new and existing capabilities to ensure Air Force operates effectively with other Services, Groups and relevant Government agencies; forms a coherent part of the ADF's joint order of battle; and is organisationally prepared for future changes in the delivery of air power.

**Vector Two – People Capability.** Develop a fifth-generation workforce that can quickly and effectively adapt to rapid technological and operational change and exploit the opportunities presented by Australia's changing workforce demographics.

**Vector Three – Communication and Information Systems.** Ensure Air Force's current and future communication systems enable integrated operations with the ADF

and our allies, and possess resilience and redundancy for operations in degraded and contested environments.

**Vector Four – Infrastructure.** Upgrade Air Force's fixed and mobile infrastructure to ensure Air Force's bases are hardened, resilient, flexible and readily adaptable to future air power capabilities and requirements.

**Vector Five – International Engagement.** Adapt Air Force's international engagement program to Defence's broader international engagement policy goals to ensure Air Force's personnel, exercises and exchanges shape and are informed by Defence's international engagement agenda to support Australia's extant military posture.

The *Air Force Business Plan* will include detailed tasks flowing from each of these vectors, as well as their measures of effectiveness. This will ensure coherent oversight and management of the strategy's implementation.

# AIR FORCE STRATEGY 2017-2027

*Air Force Will Become A Fifth-Generation Air Force*

## VECTORS

## WAYS, MEANS

## ENDS

### JOINT WARFIGHTING

#### INTEGRATION

1. Integrate major systems
2. Pursue joint ADF programs
3. Deliver 'joint-by-design' capabilities
4. Champion innovation priorities
5. Support sovereign capabilities

Integrated, joint order of battle ready for future air power capabilities

### PEOPLE

#### DEVELOPMENT

1. Design our personnel system to support future Air Force
2. Build a total integrated workforce
3. Use flexible approaches to recruitment and retention
4. Foster individual initiative and innovation
5. Generate a responsive communications culture
6. Develop an equitable and diverse workforce

Agile, innovative workforce practised in operational art for complex, integrated operations in the Information Age

### COMMUNICATIONS

#### RESILIENCE

1. Generate robust and interoperable communications systems
2. Guarantee communications for degraded and contested environments
3. Research, acquire and integrate leading-edge future communications

Resilient communications systems integrated with ADF and allies for contested and permissive environments

### INFRASTRUCTURE

#### HARDENING

1. Upgrade and harden infrastructure for high-end warfighting
2. Develop future basing concepts including mobile and agile basing
3. Align basing with modern personnel demands

Hardened, resilient infrastructure adaptable to operational requirements and future needs

### INTERNATIONAL ENGAGEMENT

#### SHAPING

1. Increase relationships with partner Air Forces
2. Develop alliance technologies
3. Enhance international exercise participation
4. Increase international support for ADF air activities

International engagement agenda that shapes and supports Defence policy

# THE FIFTH-GENERATION AIR FORCE

## Warfare in the Information Age

The Information Age is transforming how warfare is conducted. While the fundamental nature of war remains unchanged, the speed at which large amounts of information can be generated and disseminated continues to increase exponentially. This means future operational success will depend on remaining ahead of the ever-quickening decision-making cycle of our adversaries by being better able to access and understand the increasing volume of information available.

While information has always been important to military operations, its contemporary and future value now extends well beyond the battlefield. In effect, information has become the currency of the age. Information is important not only to the warfighters but to the logistics, sustainment and supply organisations that support them. It is vital to the security policy advisors and Government decision-makers that guide and direct the military and its supporting services. In short, the skilful management and dissemination of information using agile and resilient systems will define modern military capabilities in the Information Age.

Importantly, while technology offers enormous advantages to modern air forces, the 'fog' and 'friction' of war will never be completely overcome while war remains a human endeavour. Accordingly, the members of an Information Age Air Force must be comfortable in taking and interpreting guidance, and thinking for themselves in complex and ambiguous operational conditions.

## Strategic Vectors – Themes for Air Force's Delivery of Air Power

Air Force's strategy for 2017-2027 is based around the following five key themes known as vectors:

1. Joint Warfighting Capability
2. People Capability
3. Communication and Information Systems
4. Infrastructure
5. International Engagement

These vectors describe how Air Force will transform itself to a fifth-generation force over the next ten years. With this goal in mind, this strategy is primarily, but not exclusively, aimed at Air Force decision-makers.



The strategy outlines a number of ten-year goals for each vector and each goal is supported by a series of pathways, or courses of action, for achieving them.

Air Force's success in pursuing transformation through its strategic vectors will depend on its ability to adapt quickly to emergent operational and strategic trends, and in gaining the agreement and support of Air Force's stakeholders through timely and effective communications.

## Air Force Strategy and Plan *Jericho*

The Plan *Jericho* initiatives provide the foundation for Air Force's transformation to a fifth-generation Air Force. To this end, Air Force will continue to implement Plan *Jericho* under the overall direction of the *Air Force Strategy*.

The *Air Force Strategy* arises from a need for Air Force to articulate a long-term vision and planning process that stretches beyond the life of Plan *Jericho*. Furthermore, the *Air Force Strategy* encompasses all elements of the Air Force enterprise and not just those articulated in Plan *Jericho*. That said, the *Jericho* culture of innovation and transformation will be adopted and supported by the *Air Force Strategy* to ensure Air Force continues to improve beyond the life of Plan *Jericho*'s program of work.

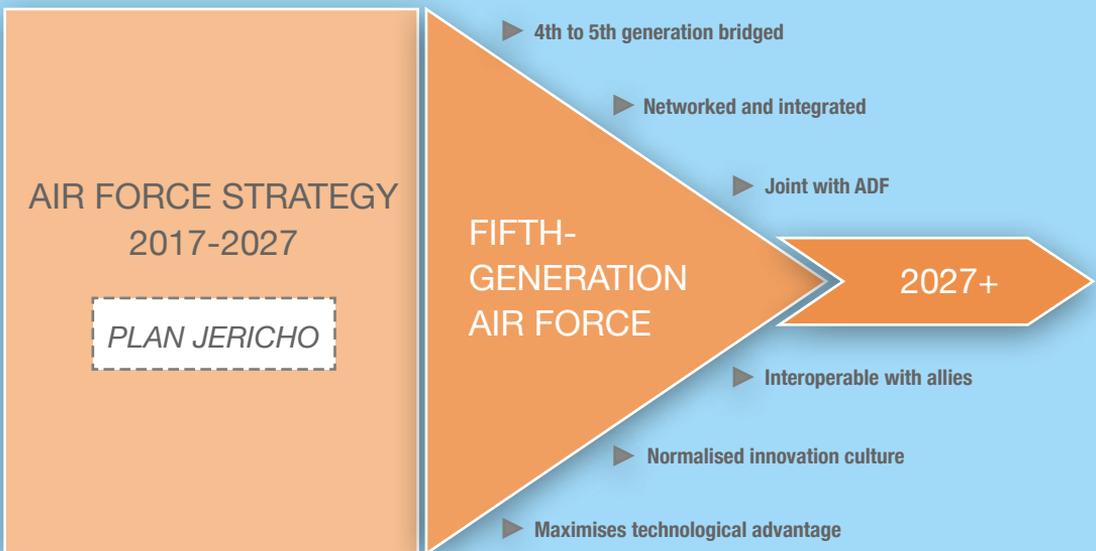


Importantly, while Plan *Jericho* has successfully acted as a catalyst for transforming Air Force to a fifth-generation force, its success has heavily depended on the *Jericho* team reporting directly to the Air Force’s most senior leadership outside of the normal chain of command. This has allowed Plan *Jericho* to avoid the distractions of routine business and remain focussed on driving transformation.

The *Air Force Strategy* will differ from Plan *Jericho* by being implemented via the normal chain of command. This will sustain and normalise the changes being driven by Plan *Jericho*.

# AIR FORCE STRATEGY

*Become a Fifth-Generation Air Force*



**Plan *Jericho*’s relationship to the *Air Force Strategy***

## Air Force's Strategy-driven Operating Model

Plan *Jericho* prompted Air Force to develop a Strategy-driven Operating Model. This model outlines internal relationships and responsibilities that will allow Air Force to manage its current operating and future development requirements more effectively. The model will also be used to oversee delivery of the *Air Force Strategy*. A detailed explanation of the model is available on the Air Force website.

## Air Force Strategy, the Joint ADF and 'One Defence'

The *Air Force Strategy* guides Air Force's transformation to a fifth-generation force designed to fight as part of a joint ADF. Similarly, the strategy recognises that its success in achieving this goal will depend on being an integrated part of the 'One Defence' business model. Air Force cannot realise its full potential without the assistance of the other Services and Groups, just as Navy and Army cannot be fully effective without Air Force's support. Therefore, the strategy has been shaped to ensure Air Force is fully aligned with the requirements of the ADF and Defence more broadly.

## Air Force Strategy and Defence Industry

The *2016 Defence White Paper* and *Defence Industry Policy Statement* have called for a transformational shift in how ADF capability is developed by incorporating Australian defence industry as a fundamental input to capability. Yet Defence and industry will be challenged to deliver on the ambitious procurement and development plan associated with the *Integrated Investment Program*. This challenge will be exacerbated by the likely requirement to update the *Integrated Investment Program* in response to emerging technologies and a changing strategic environment. Air Force will play its part by partnering with industry to address these challenges by implementing a faster and more agile approach to capability development and acquisition. Consequently, Air Force will focus on developing long-term strategic partnerships with defence industry by building on the work already undertaken by Plan *Jericho* to increase trust and confidence between Air Force and industry.

## Air Force Strategy, the United States and Other Security Partners

In line with *2016 Defence White Paper*, Air Force's relationships with its key allies and partners will be critical to Air Force's transformation to a fifth-generation Air Force. The US is Australia's most important ally and the vast majority of Air Force's current and

planned platforms and systems are common with those of the US Air Force and Navy.

Air Force must continue to develop its relationship with the US to ensure its common platforms and systems can be adapted to meet the requirements of smaller partners like Australia. This will allow the ADF the independence and appropriate level of interoperability to conduct independent operations, lead coalition operations or contribute to coalition operations.

Given the greater agility and flexibility of the RAAF in comparison to our larger US

counterparts, Air Force is well placed to contribute to the development and testing of a fifth-generation force that integrates capabilities from both the USAF and USN. This should present a significant and new contribution to the Australia-US alliance.

Australia is also seeking to foster effective relationships with our other international security partners, particularly those in our region. These relationships are important not only for building operational capability but for improving security through measures that develop trust and transparency between nations.



# AIR FORCE STRATEGIC VECTORS





# 1

## JOINT WARFIGHTING CAPABILITY



## AIR FORCE JOINT WARFIGHTING VECTOR

### TEN-YEAR OBJECTIVE

Integrate Air Force's new and existing capabilities to ensure Air Force operates effectively with other Services, Groups and relevant Government agencies; forms a coherent part of the ADF's joint order of battle; and is organisationally prepared for future changes in the delivery of air power.

The fifth-generation Air Force must be prepared to fight and win in the air, space and cyber domains as part of a joint ADF. Effective joint operations will enable the ADF to counter the high-end threats of the future battlefield in which we expect to be outnumbered and to possess a shrinking technological edge.

In order to become an integrated element of the joint ADF, Air Force must develop its future workforce to deliver air power as leaders and contributors in joint and coalition campaigns. This will require a clear understanding of how to deliver air power effects from the tactical through to the strategic levels in joint, ADF and coalition operations. These workforce requirements are specifically addressed under Vector 2 - People Capability.

Air Force must build on the experience and knowledge gained with its current platforms and systems to help inform future force-design decisions. This includes the greater use of unmanned systems and the deployment of technologies in the space and cyber domains. Furthermore, Air Force's technical capabilities must be complemented by tactics, techniques and procedures that will help Australia remain at the forefront of air power delivery.

Given the constantly evolving nature of air power capabilities, Air Force will engage with Defence and non-Defence stakeholders, including global industry and academia, in order to ensure the ADF benefits from relevant, world-leading developments in air power technology.



## GOALS

Air Force will:

1. Integrate Air Force's major systems across Air Force and the ADF to ensure Air Force can operate as a connected and integrated force.
2. Pursue programs with the other Services and Groups to develop and implement joint approaches to warfighting.
3. Deliver future Air Force acquisition programs in support of the 'joint-by-design' ADF using Defence's Capability Life Cycle process. Champion proactive engagement with industry to investigate, identify and understand all elements of the Australian industry base that contribute to Air Force capability and ensure these are considered in all acquisition and sustainment deliberations.
4. Champion innovation priorities and projects through the Defence Innovation Hub and Next Generation Technology Fund, including the identification and stewardship of innovation opportunities for Air Force capability projects.
5. In partnership with Strategic Policy and Intelligence Group, identify and support sovereign technological industries of relevance to Air Force capability.



## PATHWAYS

To achieve its strategic goals, Air Force will:

1. Ensure Air Force's future systems can be fully integrated with ADF systems and operating procedures.
2. Ensure Air Force's current systems can be integrated to an appropriate level with ADF systems and operating procedures.
3. Work with ADF, Department of Defence, whole-of-government and industry stakeholders to deliver integrated, multi-domain effects on operations.
4. Build upon Air Force's expeditionary combat capability to make an effective and robust contribution to joint operations in support of Australia's Strategic Defence Interests.
5. Ensure Air Force remains agile in its acquisition and force-programming strategies and balances these deliberately against the ADF's joint force objectives and Defence's international engagement strategy.
6. Exploit the innovation opportunities presented by the *First Principles Review of Defence* and *Defence Industry Policy Statement 2016* in promoting greater industry involvement and partnership in Air Force's capability development process. Remain closely engaged with other areas of Defence such as Capability Acquisition and Sustainment Group, Defence Science and Technology Group and Defence Industry Policy Division to ensure alignment with Defence's broader innovation priorities.
7. Partner with Defence Industry Policy Division and the Centre for Defence Industry Capability to maximise Australian defence industry involvement in the acquisition and sustainment of Air Force capability and support the development of a long-term Australian industry capability that can meet Air Force's needs.
8. Sponsor research projects and activities in Air Force, industry and other professionally expert organisations such as universities and think-tanks that enable Air Force to contribute to Defence's force-development process through the provision of expert air power advice.



## DEFENCE STRATEGIC CONTEXT

Defence White Paper 2016

There will be more emphasis placed on the joint force—bringing together different land, air, sea, intelligence, electronic warfare, cyber and space capabilities so the ADF can apply more force, more rapidly and more effectively when called on to do so.

—*Defence White Paper 2016, 4.5*

Under the plans set out in this Defence White Paper, Defence will implement a substantial force modernisation program, which will bring major organisational and cultural challenges. This modernisation will introduce new capabilities that will carry within them the requirement for new ways of working, particularly as Defence integrates complex and globally networked systems into the joint force.

—*Defence White Paper 2016, 7.24*



# 2

## PEOPLE CAPABILITY



## AIR FORCE PEOPLE VECTOR

### TEN-YEAR OBJECTIVE

Develop a fifth-generation workforce that can quickly and effectively adapt to rapid technological and operational change and exploit the opportunities presented by Australia's changing workforce demographics.

The fifth-generation Air Force requires a workforce that is highly-qualified, motivated and adaptable in order to exploit fully the potential of its modern platforms and systems. This will require Air Force to recruit the best people from the broadest possible cross-section of Australians and then develop them as air power professionals.

Air Force people must be enabled and encouraged to be comfortable with uncertainty, able to demonstrate initiative and innovative thinking, and focused on delivering operational outcomes. This will require Air Force to develop its people across the whole of their careers and to adopt a modern education and training system that builds leadership skills and technical, combat and social mastery.

Air Force must continue to modernise its workforce employment practices to meet the needs of contemporary Australians. This means adapting to the changes in workforce behaviour, skills-base, demographics and employee expectations in order to ensure Air Force is an employer of choice. That said, there will be some constraints on this adaptation as the unique nature of Service life requires that organisational requirements take priority.

The key challenge for this vector will be to rapidly translate Air Force's future vision into a meaningful series of personnel system and workforce changes, noting the often lengthy lead times for transitioning and building the personnel element of capability. Nevertheless, Air Force must act to influence personnel and training systems, many of which sit outside of Air Force's direct control, to meet its future warfighting requirements and organisational priorities.



## GOALS

Air Force will:

1. Ensure Air Force's personnel system, including its education and training system, will meet the requirements of operating and sustaining the future Air Force.
2. Build an integrated workforce that comprises Permanent Air Force, Reserve, Australian Public Service and contractor personnel with the necessary skills to meet Air Force's capability needs.
3. Employ flexible approaches to the recruitment and retention of Air Force personnel to ensure Air Force people are drawn from the best talent Australia has to offer.
4. Foster an Air Force culture that encourages individual initiative and innovation while reinforcing professional mastery in the air power domain.
5. Generate an internal Air Force communications culture that enables airmen to be responsive to Air Force's strategic, tactical and operational requirements.
6. Increase Air Force's operational capability by developing and maintaining a diverse workforce, particularly in regard to the attraction and retention of women.



## PATHWAYS

To achieve its strategic goals, Air Force will:

1. Align Air Force's existing workforce with its capability and organisational priorities, including those emerging from the *First Principles Review of Defence* and the *Defence White Paper 2016*.
2. Restructure Air Force where required to meet the warfighting requirements detailed in joint and Air Force operating concepts.
3. Develop career pathways and education opportunities to ensure Air Force can provide appropriately trained and qualified personnel to operate and support Air Force's new capabilities. This will include developing flexible patterns of employment and innovative uses of existing employment structures to sustain and develop a capable and adaptive 21st-century Air Force workforce.
4. Employ Plan *Jericho*'s culture of innovation as the basis for a revitalised approach to learning and development and adopt a modern education and training system.
5. Train and prepare Air Force members at the appropriate points throughout their professional development continuum to operate effectively in the joint and combined environments.
6. Promote a commitment to 'jointness' in Air Force culture such that Air Force members recognise their own capabilities as operating primarily on behalf of the whole ADF.
7. Promote commitment to Air Force's strategic goal of transforming to a fifth-generation force and reward initiatives that facilitate this goal.
8. Build a stronger and more collaborative relationship with Defence People Group to pursue the right people policy outcomes to support our transformation to a fifth-generation Air Force.
9. Ensure at least 25 per cent of Air Force's workforce is female by 2023 and then progressively increase this baseline to 2027.
10. Collaborate with Defence People Group to recruit an Air Force workforce that is representative of Australia's socially and ethnically diverse society, including meeting Air Force's minimum 2.7 per cent Aboriginal and Torres Strait Islander representation by 2018.



## DEFENCE STRATEGIC CONTEXT

Defence White Paper 2016

The ability of the ADF to successfully conduct operations is underpinned by its world class training. The introduction of new high technology capabilities into the ADF in the coming decades, and the more complex strategic and operational environment of the future, means it is critical to invest in new training systems to prepare ADF members to operate these systems and conduct complex missions.

—*Defence White Paper 2016, 4.88*

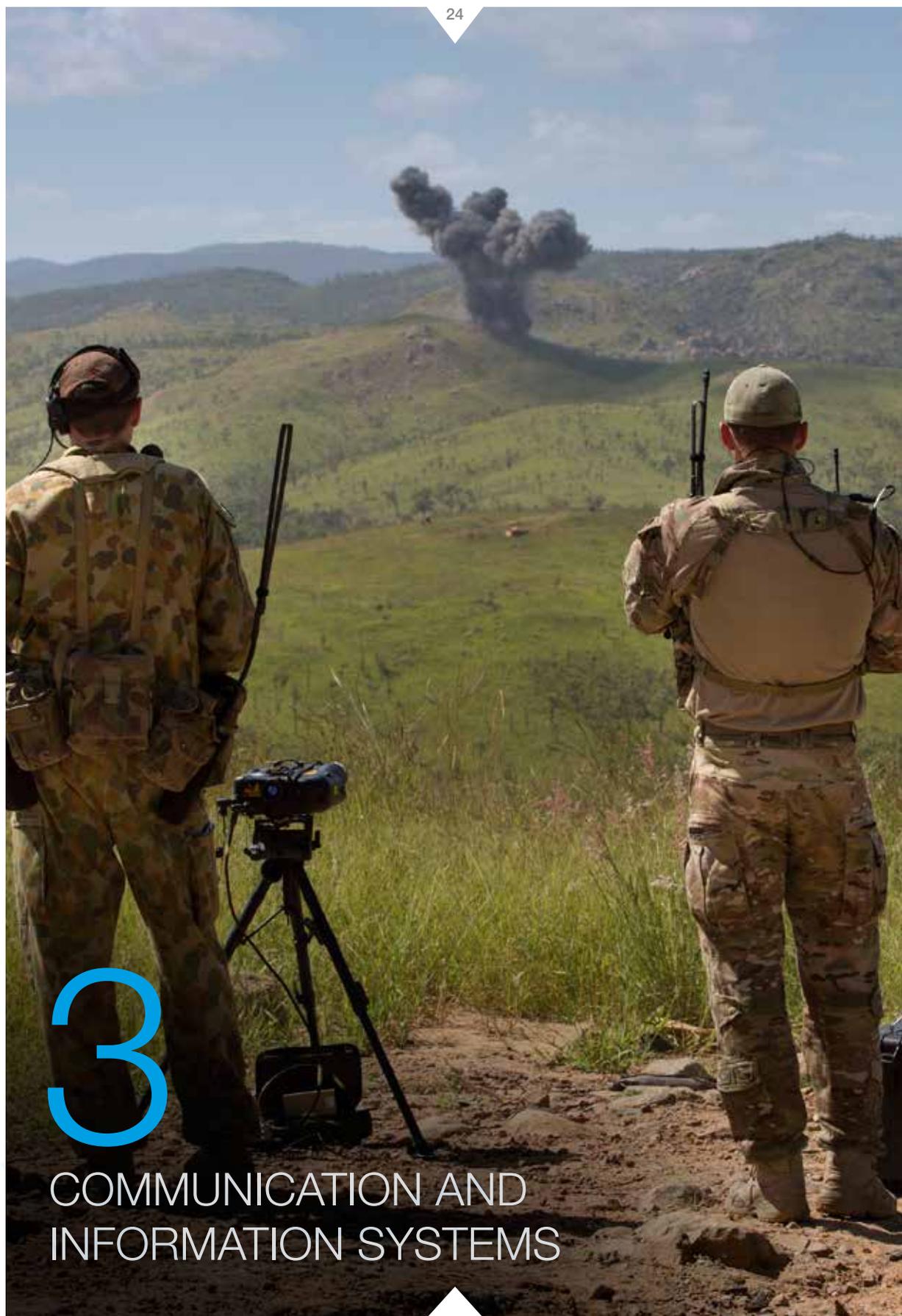
As Defence adopts new and more complex capabilities, the demands on the integrated workforce will increase. New technologies

will require new skills and will rely even more than now on the diverse range of skills of the integrated workforce. To meet these demands, the Government will undertake the largest single rebalance of the integrated Defence workforce in a generation through the implementation of the First Principles Review.

—*Defence White Paper 2016, 6.7*

The Defence workforce, both ADF and APS, will need to be reshaped to meet the demands of a more technologically capable and active future force. ... A new contemporary workforce management model will increase the ability of ADF members to move between the permanent ADF and Reserves to best meet their individual circumstances and best harness their skills and expertise.

—*Integrated Investment Program 2016, Overview, 44*



# 3

## COMMUNICATION AND INFORMATION SYSTEMS



## AIR FORCE COMMUNICATION AND SYSTEMS VECTOR

### TEN-YEAR OBJECTIVE

Ensure Air Force's current and future communication and information systems enable integrated operations with the ADF and our allies, and possess resilience and redundancy for operations in degraded and contested operational environments.

The fifth-generation Air Force must be networked to fight and win as part of an integrated and joint ADF. Such networking can only be achieved through the use of capable and resilient communication and information systems.

Air Force will continue to adapt its existing command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) systems to ensure they are compatible with each other and with ADF and coalition systems. Achieving interoperability between the different generations of technical systems used by Air Force, the other Services and our potential partners will be essential to our future operational success.

To mitigate the need for the future 'stitching' of different C4ISR systems, Air Force will remain abreast of the technological curve in the design of its systems and endeavour to ensure they are integrated and robust by design rather than seeking integration after the capabilities enter service. Air Force will also support technological research that will improve the integration of our systems and provide our networks with greater resilience and robustness.



## GOALS

Air Force will:

1. Ensure Air Force's existing and emerging communication and information systems are technologically robust and appropriately interoperable with joint ADF and coalition partners.
2. Ensure Air Force is capable of operating in a joint ADF and coalition setting in contested and degraded electronic environments.
3. Sponsor research into technologies and human factors that will enable Air Force's communication and information systems to remain at the leading edge of military capability, and integrate these technologies into Air Force's joint-by-design program.



## PATHWAYS

To achieve its strategic goals,  
Air Force will:

1. Acquire communication systems that are readily adaptable to future technology and capability developments. This will mean, for example, exploring the opportunities presented by open-system architectures as a baseline for Air Force communications to ensure Air Force is agile in its present state and able quickly to adapt to technological changes.
2. Integrate technological advances in Air Force's force design process in a way that matches the commercial and sustainment realities of these technologies as they are developed and selected for ADF service.
3. Mitigate against an over-reliance on networks by hardening network infrastructure and developing fallback options to provide redundancy against communications denial, disruption, degradation or destruction by an adversary.
4. Increase Air Force's Information Age skill-sets by normalising information network competencies and digital proficiency among all Air Force members.
5. Collaborate with Chief Information Officer Group to help shape the delivery of information systems that are essential to a fifth-generation Air Force.



## DEFENCE STRATEGIC CONTEXT

The Government will increase investment in capabilities to better connect the communications, sensor and targeting systems of various ADF platforms, including the Joint Strike Fighters, Wedgetail, *Hobart* Class Air Warfare Destroyers and Growlers. Being able to quickly exchange information, such as the location of threats, means the ADF can combine its already potent individual capabilities more effectively during joint operations—generating greater combat weight and lethality.

—*Defence White Paper 2016, 4.43*

Modern, secure and highly effective information and communications technology is critical to maximise the combat effects of an integrated and networked ADF.

—*Defence White Paper 2016, 4.82*

As technology life cycles continue to shorten, Defence must be able to move more quickly to acquire contemporary information and communications systems; this will ensure that Defence maintains a technological edge, while also simplifying maintenance and security.

—*Defence White Paper 2016, 4.84*

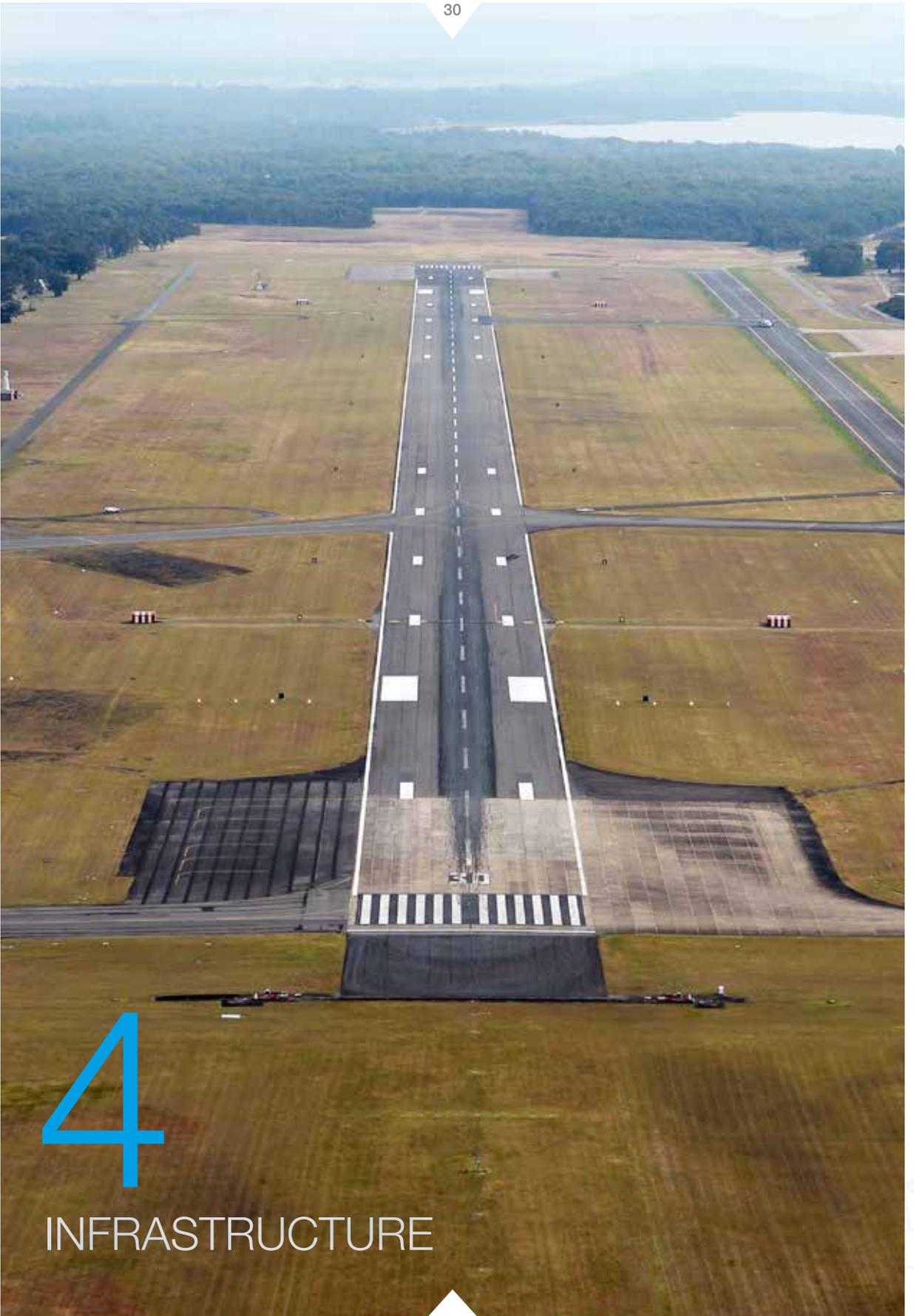


The future force will be characterised by more sophisticated intelligence, surveillance, and reconnaissance systems and long-range air defence and strike weapons employed by maritime, air and ground forces, along with increasing reliance on space-based capabilities. To this end, Defence will develop systems, sensors and networks to deliver effective air and space situational awareness around Australia and in deployed locations. A new, more sophisticated command, control, communications, computer and intelligence system will also be required to be able to fuse information from multiple sources. This will enable coordination of forces and more timely operational response, including an ability to support the more comprehensive situational awareness required for capabilities such as integrated air and missile defence.

—*Integrated Investment Program 2016, 1.8*

The Government will increase investment to improve communications, sensors and targeting system integration between various platforms, including the Joint Strike Fighters, Wedgetail, *Hobart Class Air Warfare Destroyers*, Growlers and land-based systems—so that their capabilities can be combined more effectively during joint operations, generating greater potency and lethality. Realising the full potential of the Joint Strike Fighter and Growler aircraft is dependent on investments outlined in the intelligence, surveillance, reconnaissance, electronic warfare, space and cyber stream. These investments will facilitate enhancements in processing, analysing and disseminating intelligence and mission data.

—*Integrated Investment Program 5.5*



# 4

## INFRASTRUCTURE

The fifth-generation Air Force will continue to require capable and resilient air bases that can support networked air operations and be readily adapted to meet evolving operational and technological requirements.

Air bases are fundamental to the employment of air power and will continue to be so for the fifth-generation Air Force. Bases provide mission-essential services such as fuel, armaments, maintenance and planning for the sustained operation of our capabilities. They are key nodes for the transmission of digital information that support mission execution and gathered intelligence distribution. Bases are also crucial for force concentration and the deployment of ADF and allied forces.

## AIR FORCE INFRASTRUCTURE VECTOR

### TEN-YEAR OBJECTIVE

Upgrade Air Force infrastructure to ensure Air Force's fixed and mobile bases are hardened, resilient, flexible and readily adaptable to future air power capabilities and requirements.

Our bases can be on Australian territory or overseas when a host country has invited Australia to support operations from their territory.

The current state of Air Force's infrastructure, notably on its Australian bases, presents a risk to Air Force capability. The permanent bases were designed and developed to meet the requirements of Air Force more than half a century ago and infrastructure across all bases has suffered from under-investment for some time. Air Force will partner with Estate and Infrastructure Group (E&IG) to deliver base functions, and will work with them to explain the future requirements of our bases clearly and convincingly to all stakeholders.

Air Force requires improved physical base infrastructure to support our new capabilities. This includes investing in the digital infrastructure required to enable and exploit the benefits of a fifth-generation Air Force operating in the air, space and cyber domains. Moreover, military modernisation and expanding capability within our region means that we must put more focus on the resilience and flexibility of our air base capabilities.

In addition to ensuring Air Force's bases meet the technical requirements of its future force, Air Force will strive to ensure they meet the requirements of its workforce and their families in order to attract and retain the best people for Air Force's service.



## GOALS

Air Force will:

1. Develop new, upgrade existing and harden relevant Air Force infrastructure in order to enable the conduct of advanced and high-end warfighting operations.
2. Ensure Air Force possesses basing and operating concepts that meet future operational requirements, including the need for mobile and agile basing in ADF and coalition operations and campaigns.
3. Ensure Air Force's infrastructure requirements are coherent with its personnel requirements, such that Air Force basing and Air Force personnel requirements reflect the demands of a modern Australian workforce.



## PATHWAYS

To achieve its strategic goals,  
Air Force will:

1. Invest in the vital link between Air Force's physical infrastructure and the non-tactile digital and electronic infrastructure on which Air Force is critically dependent.
2. Develop and exercise mobile and agile basing constructs that reduce Air Force costs, increase Air Force resilience and increase Air Force's international engagement opportunities.
3. Ensure Air Force's infrastructure planning responds to the needs of its changing workforce requirements, such that Air Force base facilities meet functional and lifestyle needs.
4. Continue to expand our working relationships with E&IG in the development and management of improved Air Force infrastructure.



## DEFENCE STRATEGIC CONTEXT

Enabling capabilities include critical infrastructure (such as bases, training ranges, ports and airfields), information and communications technology, logistics, science and technology and health services. These capabilities are fundamentally essential to the effective operation of the ADF's most potent and capable combat systems, including its ships, aircraft, land forces and other systems.

—*Defence White Paper 2016, 4.61*

New and upgraded facilities and infrastructure will be established over the course of this decade at RAAF Bases Williamtown, Tindal, Townsville, Darwin, Curtin, Scherger, Learmonth, Pearce and Edinburgh, and Defence Establishment Myambat, including in support of the operation of the Joint Strike Fighter.

The Government will similarly upgrade RAAF Bases Edinburgh, Darwin, Pearce, and Townsville and the airfield at Cocos (Keeling) Island to support introduction of the new P-8A Poseidon maritime surveillance and response aircraft.

—*Defence White Paper 2016, 4.65-66*

The more capable, more active and internationally engaged future force will require significant additional investment in supporting infrastructure to enable us to meet our agreed strategic objectives, including the need to strengthen Defence's presence in northern Australia. Infrastructure requirements relating to our enhanced presence in northern Australia include upgrades to bases such as RAAF Tindal (Northern Territory), RAAF Learmonth (Western Australia), HMAS Coonawarra (Northern Territory) as well as to facilities on Cocos (Keeling) Islands. In addition, there are infrastructure requirements related to the United States Force Posture Initiative in northern Australia, along with a heightened program of military engagement including increased joint and multilateral training and exercises with other security partners. We also need to adapt to changes in land use within communities around Defence sites (leading to increasing encroachment of some facilities) along with environmental pressures.

—*Integrated Investment Program, 2.8-9*



# 5

## INTERNATIONAL ENGAGEMENT

The fifth-generation Air Force must develop and maintain productive and robust relationships with key foreign military forces in order to improve its operational effectiveness and build trust and transparency with other nations. Operational effectiveness will be increased by developing higher levels of interoperability with our allies and partners, particularly with the US Air Force and Navy, and by being allowed access to overseas bases, technology and information. Greater transparency and trust built from these relationships will contribute to the Defence White Paper goal of reducing the potential for armed conflict between nations.

## AIR FORCE INTERNATIONAL ENGAGEMENT VECTOR

### TEN-YEAR OBJECTIVE

Adapt Air Force's international engagement program to Defence's broader international engagement policy goals to ensure Air Force's personnel, exercises and exchanges shape and are informed by Defence's international engagement agenda to support Australia's extant military posture.

Air Force already pursues a comprehensive and robust international engagement program that spans Air Force's dependencies and enablers across military-to-military, industry, science and technology partnerships. Of special note, international training exercises and senior level relationships make a critical contribution both to building trust, transparency and interoperability with foreign services and to achieving Air Force's single-service, joint and allied training and capability generation requirements.

Air Force will increase the breadth and depth of its international engagement activity in alignment with the Defence White Paper's increased focus on international engagement. Air Force will specifically target opportunities in the air, space and cyber domains—domains in which Air Force has a critical shaping role. Air Force will also ensure its international engagement activities support the *Defence International Engagement Plan*, thereby ensuring close alignment with Defence's international engagement priorities more broadly.

Air Force will ensure its people are internationally aware and competent in generating Air Force, ADF and whole-of-government outcomes. Air Force will pursue person-to-person relationships with Air Force's international partners, especially those in Australia's near region, as a key component of its international engagement agenda. Air Force will also work with international partners to develop technological advances in areas of mutual interest, especially those that focus on integrating capabilities with our key allies, most notably the United States.



## GOALS

Air Force will:

1. Develop professional relationships at both the personal and organisational levels with allies and partner military forces in order to generate and sustain Air Force's regional and global influence, and to access off-shore basing.
2. Cooperate with international partners to develop technologies and capabilities for shared benefit.
3. Enhance Air Force's international exercise participation to build greater interoperability with allied and partner services by ensuring Air Force's capabilities are integrated during combined and coalition planning activities.
4. Maintain and enhance relationships with foreign partner services in order to increase operational effectiveness through their support for Air Force, ADF and coalition air activities.



## PATHWAYS

To achieve its strategic goals,  
Air Force will:

1. Enhance its participation in international exercises that form the basis for stronger coalition relationships, especially those that focus on increased interoperability with partner military forces.
2. Participate in technological research and development activities that will enhance Air Force's interoperability with ADF allies and partners in support of Australia's Strategic Defence Interests and Strategic Defence Objectives.
3. Provide trained personnel to Defence's international engagement plan to support

Defence's increased strategic focus on international engagement as a contributor to Australia's security and regional stability.

4. Find mutual pathways with Australian partners in the air domain to support common interests in the air, space and cyber domains, especially those relating to global access and reach for Australia and Australia's international partners.
5. Improve the cultural awareness of the Air Force workforce and increase the number of personnel with foreign language proficiency.



## DEFENCE STRATEGIC CONTEXT

Australia can better pursue its objectives of growth and prosperity and protect its interests in our region and globally by working with others, bilaterally, regionally and multilaterally. Defence's international engagement—its physical footprint overseas and pattern of collaborative activities such as joint exercises and training—is an integral component of Defence's posture.

—*Defence White Paper, 5.5*

Defence's international engagement builds the relationships and cooperation which Australia requires to contribute to a more stable and secure international environment and to respond to strategic risk. Effective international engagement maximises the effectiveness of our contributions to coalition operations.

—*Defence White Paper, 5.6*

Defence will increase its investment in international engagement over the next 20 years to build cooperation with key partners and improve the coordination of responses to shared challenges.

—*Defence White Paper, 5.7*

A more active and internationally engaged Defence posture will involve an increased operational tempo for the ADF and its enabling elements, in particular in support of the government-agreed strategic direction for international engagement. Defence will conduct a broader and deeper program of engagement with international partners, with a focus on maritime South East Asia and the South Pacific, to take a more active role in shaping Australia's strategic environment. This will involve a proactive pattern of peacetime activities, exercises and operations in the region, with priority on South East Asia and the South Pacific.

—*Integrated Investment Program 2016, 2.67-68*





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