



ASPI 'Dinner with the Chiefs' - Chief of Air Force: Air Marshal Geoff Brown AO - Tuesday 5 June 2012

(Check against delivery)

Introduction

Ladies and gentlemen, it is a pleasure to be with you tonight to address a topic which I am most passionate about; the role of the Royal Australian Air Force in the security of this great nation. I wish to sincerely thank Peter Jennings and the members of the Australian Strategic Policy Institute for the opportunity to be here this evening. Furthermore, I congratulate ASPI on continuing to be a leading force in raising the level of national debate on matters that shape the future of this country.

There are, I would suggest, three prime drivers that condition the role of the Royal Australian Air Force in the current and future security environment; Australia's national security strategy, the enduring roles of air power, and the level of capability available to execute these functions.

At the forefront of these drivers, and the most consequential of them, is the strategy that underpins Australia's approach to security. Tonight I hope to briefly lay out the case why I believe conceptualising Australian military strategy within a grand national maritime strategy is an appropriate and sensible approach when we come to discuss the role of the RAAF in Australian national security. Furthermore, I hope to establish the clear and unambiguous roles for the RAAF in this approach, and how our capabilities, people and professionalism meet the challenges of this environment, before finally pointing to some of the issues that will influence the RAAF's ability to meet its responsibilities within this strategy.

Australia is a land surrounded entirely by sea, it is also, however, covered one hundred percent by air, and this fact fundamentally shapes our strategic approach to national security. Air, land and sea forces are the irreducible minimum components of our national security approach and the roles each of our forces play in any operation, be it peace or conflict, are determined by the context of the issue and the particular approach directed by Government. Our national security enterprise is empowered by the capabilities air power provides and it is the Royal Australian Air Force (primarily) that delivers this air power for any joint response to a national security circumstance.

Maritime Strategy

Geography. For Australia, it is geography that has fundamentally shaped who we are. It has shaped how we live, how we trade and how we interact with the international community of states. It has shaped how we perceive our security needs today, and into the future, and it has shaped our military forces and strategic thinking likewise. Geography has, in short, determined what sort of nation we are - and that nation is at essence a maritime trading one.

Trade. Australia, whether we consciously acknowledge it or not, has more or less since federation operated some form of maritime strategy. Be it one premised upon our traditional affinity with

Great Britain, or one that recognised the importance of our trans-Pacific alliance with the USA. Our ability to function as a maritime trading nation has been underpinned by the use of the oceans and airways surrounding our shores as reliable means of engaging with our neighbours and trading partners.

So today when we speak of a security strategy we are in fact speaking of what has been the basis of our way of life ever since we became an independent sovereign state.

Continental versus Maritime strategy? There can be no escaping the fact that we are an island nation, and while we enjoy an uninterrupted connection to the global community through the many communication and information mechanisms available, we are divided geographically from the rest of the world by the sea. It would be easy to suggest that to secure Australia we have only to ensure we are able to deter or deny any attempts to attack this country - or in the event of lodgement by an enemy - defeat or repel them. In other words, it can be argued that Australia's defence strategy ought, primarily, and perhaps solely, to be centred on the territorial defence of our national sovereignty. But this may very well be a somewhat myopic view given the global nature of contemporary security.

Clearly, territorial defence can never be diminished or neglected, however, important as this view is, it misses the broader context that Australia's prosperity, and indeed our way of life, is based around our ability to trade, and more precisely, to be able to trade across the oceans and airways. Without belabouring the obvious, I think it is worth reiterating the fundamentals of our national circumstance, especially as they are so easily and perilously assumed away.

Maritime commons. The vast majority of this trade is conducted over the maritime and air divide between ourselves and our trading partners around the globe. Crucial trading routes, the presence of large and growing regional naval capabilities, as well as transnational security concerns such as piracy, drive Australia to put the Indian Ocean, alongside the Pacific Ocean, at the heart of our maritime strategic and defence planning. Unimpeded access through the maritime commons, stability within our region, the security of our trading partners and a continued preservation of international order are all conditions that elementally influence our approach to security.

In short, in the absence of an existential threat to our territory, anything that threatens our ability to conduct trade over the seas and through the air is the greatest and most consequential risk to our security and way of life. A peaceful, cooperative and stable maritime environment is the necessary precondition for our continued national prosperity.

Stability fragility. International stability, however, is a fragile commodity. The security environment can rapidly, and without forewarning, transition from a state of relative peace and calm into a violent state of turmoil; threatening the essential preconditions of our maritime trading way of life. Normally, if history is a reliable guide, this will occur at 2 AM on a Sunday morning during the holidays. The end of the Cold War, the sudden and unforeseen events of 9/11, and the recent uprisings in the Middle East attest to this fragility. We cannot assume the regional stability we observe today is guaranteed to remain so. Stability and security, especially for a trading nation, go hand in hand. The level of stability we might enjoy in our region is causally linked to the level of security we would deem necessary to our preferred way of life.

For these reasons, Australia's interests are not just limited to our sovereign territory or to our immediate neighbourhood, but stretch throughout the Asia Pacific region and extend globally. Consequently, unfettered access to the maritime and air commons across which we trade, and stability within our region, are pivotal to the continuation of our way of life and our standard of living. The implications of this are, I would suggest, obvious, if perhaps not commonly well understood.

Conditions for trade. Unfettered sea and air lines of communication, unwavering support to international law and good order at sea, are all necessary conditions to ensure trade and commerce flourish to the benefit of all involved. The upholding of all of these is clearly in our national interest.

National Interests. It would come as no surprise then that successive Governments have maintained that our national security objectives and national strategy reflect the need, to not only defend Australia and its direct approaches, but to ensure our capability and capacity to act as a free maritime trading nation. Such a strategy, a maritime strategy, would amongst other things;

- Enable us to go to the aid of friendly states in our region;
- To control and develop our important offshore resources, including oil and gas;
- Have the capability to control fisheries, illegal immigration, smuggling, piracy; and
- Exercise the capability to maintain a level of security anywhere around our coasts or offshore islands.

Clearly, these capabilities will not always, or only, be exercised by the Australian Defence Force.

WoAG enterprise. A maritime strategy, if it could possibly need further elaboration, is a whole of government enterprise. Defence, and indeed the Air Force, plays a large role, but it does so in concert with all relevant federal and state governmental organisations. And it does so importantly in partnership with industry and the private sector.

Force in a maritime strategy. Australia by any global measure is a tolerant society. Consequently, the application of force is only authorised when all other avenues of resolution and response options have been exhausted. This means clearly, that the ADF will not have the lead role in many of the response options Government may choose to pursue. Indeed, the ADF's maritime strategy is predicated on *understanding and shaping* the environment where our national interests lie, providing a *deterrent* against any that seek to act against Australia, and then if absolutely necessary, *denying or defeating* any adversary that attacks or threatens Australia or its interests. This potentially extends throughout the entirety of our maritime environment.

Not a Naval strategy. Finally, with regards to Australia's military maritime strategy, it is probably redundant of me to note that a maritime strategy is not synonymous with a naval strategy. Defence's maritime strategy, involves air, sea and land forces operating jointly to influence events that impact our national interests. The ADF contribution to our national maritime strategy is, and can only ever be, considered a joint contribution. This ought to be neither a startling nor a novel revelation. Joint maritime operations have enjoyed a sound heritage and an important place in Australian defence thinking.

MacArthur's Island hopping campaign. To give an example of this concept in operation we need only to consider General Douglas MacArthur's island hopping' campaign across the South-West

Pacific from New Guinea to the Philippines during World War Two. The unique characteristics of each service were required to control the air, control the sea lines of communications and secure the islands to achieve victory in the South-West Pacific. Forward airfields enabled the projection of land-based airpower that provided the ISR, control of the air, strike and air mobility that history records were vital in enabling sea and land forces to conduct their operations. Without land forces there would have been no forward bases, and without sea power there would have been no projection capability of the land force. Together the land, sea and air forces constituted a power far greater than the sum of their parts.

No maritime strategy can achieve success without the use of each service's core warfighting capabilities. This has been true across our last 100 years, is true today, will continue to be so into the future. Some argue that to meet the security challenges of tomorrow the Air Force of today needs to transform. To some degree that may be correct. We need to continue balancing the Air Force to be able to respond to future challenges. We will need to evolve the way we conduct our business, but not necessarily our fundamental roles. So when asked about the role Air Force plays in Australia's future security I like to start with an appeal to the past.

Slices in Time

Mark Twain was once quoted as saying that 'while history doesn't repeat itself, it sure does rhyme.'

From this I deduce, and my own experiences confirm, that while history maybe an unreliable guide to the future, it is still the best that we have. Philosophically, we would have to confess that many of the decisions we might make today, or at any particular point in time, may in fact turn out to be fundamentally wrong when we look back with the clear benefit of hindsight 20 years later. In many cases, the prevailing political wisdom of how the future will look, how things will certainly turn out, inevitably prove to be categorically wrong.

I will paraphrase George Friedman, an American political writer, who illustrates this point by taking a series of 20-year cuts through the 20th century to show how wrong you may be when you sit at any point in time and look to the future.

1900. It is appropriately interesting if you take the last 100 odd years. If we go back and imagine London around 1900—remembering the Wright brothers have not yet flown—and you look across the globe. European capitals *influenced* every part of the world. At that point in time the major empires were well interconnected. Nobody, including Norman Angell in his work the '*Great Illusion*', could envisage a war lasting any longer than three weeks because, amongst other things, there would be too much financial strain on the highly interconnected markets, and simply because of the fact that there existed global European empires – sound familiar.

1920. We move forward 20 years. Millions have been killed in a four-year war, and all of the empires—most particularly the Austro-Hungarian Empire, the Ottoman Empire—are in tatters. America arrived on the world stage with a force of a million men and all of a sudden became a major power. Japan, previously in the shadows, is on the rise. But in 1920 despite the turmoil of recent times you are *really sure* of one thing; the peace treaty with Germany means they will *never* rise again.

1940. We roll forward to 1940 and Germany has defeated France and dominates Europe; Russia and Germany have a pact. In Britain in the summer of 1940, life looks pretty grim—it might not be a ‘Thousand Year Reich’ but you can imagine Germany dominating the region for a little while longer. Aircraft are emerging as the *critical* weapon of war because without air superiority, the effectiveness of ships and ground forces comes into question.

1960. Moving into 1960 and you find Germany was defeated within five years—that was not something you could imagine in 1940—Europe is divided down the middle, and the competition for global influence is being played out between the United States and the Soviet Union. America’s nuclear domination tempers the Soviet Union’s options. China in 1960 might be a threat because of the fanatical Maoist regime. The only apparent option for the Soviets to achieve their goal of global dominance is to invade Europe through the Fulda Gap; so that is what the West prepares for during the next 15 years. If we think specially about aircraft for the moment, speed is the key factor—Mach 2 is everything. We are looking at high speed interceptors; you did not need to turn, missiles were the go.

1980. If we roll forward to 1980, the world has changed quite a bit. America has lost a war, not with the Soviet Union but with communist North Vietnam, and they saw a dramatic reversal in relations with oil-rich Iran with the Soviets looking to be the dominant influence in the region. In many ways America feels in retreat, and their status as a global superpower under question. In regard to aircraft we are back to looking at manoeuvre as the key to air superiority.

2000. Just 20 years on, the Soviet Union has collapsed, America is the sole superpower and the world looks peaceful and prosperous. The only instability most analysts envisage are conflicts in Haiti and Kosovo and limited regional conflicts, but just one year on September 11 occurs and, today we have been at (global) war for 12 years.

2020. Anybody who sits here in 2012 and tells you with certainty what it is going to look like in 2020 suffers a profound lack of imagination. We need to appreciate that while history offers many excellent lessons, it provides more a sense of the future rather than an accurate prediction of events in any sense. From an Air Force perspective, we clearly understand that our shape needs to be tempered by the past, but ready to respond to the unpredictable realities of the future.

Regional stability. Narrowing our focus to our immediate region, we have seen a prevailing condition of relative peace for the last 60 years. Our region has gone through phases of rapid economic development; development underpinned by security fundamentally provided through US domination of the Pacific. The US presence and close partnerships endemic in the Asia-Pacific region, have ensured the openness of the sea lines of communication and global commons which are essential to peaceful trade and economic development. However, as we are constantly reminded and as we have seen with recent events further afield, stability is still a fragile commodity and we are mindful and attentive of changes in regional relationships.

China and India. If I look forward into the future, (despite my own best advice against such) what do I see? I see a China well and truly on the rise; I see an India undergoing rapid growth. Both countries are ancient civilisations looking for their place in the world. Accommodation in some form, I would suggest, is inevitable.

As we look into the future, changes across our region raise the possibility for strategic miscalculation and nationally we need to be ready to respond to ensure the security of our interests.

Recent Lessons. The global instability witnessed across the last 12 years enables observers, astute or otherwise, to draw a number of lessons. At the forefront of these is the increasing cost and complexity of ground campaigns. However, given the appropriate circumstances there are options to land-centric, manpower intensive operations. At the RAAF Air Power Conference held last month we explored the recent conflict in Libya as a contemporary example of an evolving international security environment.

One of the key lessons from the Libya campaign was that an inferior ground force enabled by air power can prevail over a superior armoured force. Air power shifted the asymmetrical advantage across to the rebel forces.

Libya. The other significant observation out of Libya is that any Western army may have beaten Qaddafi's forces in about two weeks, but NATO and the United Nations chose not to. They chose not to do so because experiences gained from Iraq and Afghanistan highlighted the complexity of ground operations in wars where the security of the local population was the objective rather than the defeat of an adversary.

The emerging norm of 'responsibility to protect' and the complexities of United Nations coalition operations, ensure that in such circumstances we find ourselves very quickly trying to navigate a minefield of ethical, conceptual and pragmatic challenges. Once you put military people on the ground, the situation becomes incredibly complex. There is a time and a place for 'boots on the ground', and if faced with this situation the Army and the ADF will be ready. But air power enables an alternate bridge between policy and strategy, providing greater range of options to achieve limited strategic objectives. It has a utility beyond simple kinetic effect. It has the ability to reflect proportionality, reciprocity and credibility. Air Power delivers these effects through its principle roles.

Four fundamental and enduring roles

Since its inception as a military tool nearly 100 years ago, air power has played a crucial role in every conflict Australia has been involved in. I would suggest air power is more critical to our national security today than any time in our past, and its impact on our maritime strategic environment will only continue to grow. Our national security enterprise is empowered by the capabilities air power provides and it is the Royal Australian Air Force that delivers this air power for any joint response to a national security crisis.

So what does an air force bring to the joint fight? In my opinion we only do four things, and we have been doing these four fundamental things since World War I.

Air Mobility

Firstly, we as an air force move things through the air.

Air mobility is a cornerstone activity in virtually any military strategy. From the Berlin Airlift to Cyclone Yasi, the RAAF has a long history of responding to crises that require the rapid movement of people and equipment over long distances at very short notice.

C-27J. The Air Force will continue this tradition with the acquisition of the C-27J. Announced at last month's Air Power Conference by the Minister of Defence, the battlefield airlifter will close the gap we have in our mobility spectrum, further enabling Army and Navy to achieve their tactical objectives. The Spartan, scheduled for delivery in 2015, will enable more than four times the number of airfields to be reached in Australia and twice more in the Asian region than can be accessed by the C-130. The C-27J and is the right aircraft for our Australian environment.

C-17. In addition, November this year will see the arrival of our sixth C-17 which will double the number of C-17 aircraft available for operations at any one time from two to four, enhancing Australia's ability to move people and equipment across large distances relatively quickly.

The additional C-17 increases the response options available to Government and will extend the life of the C-17 fleet by reducing the use of each aircraft.

ISR

The second thing we do is to observe things from the air, whether they be on the ground or the sea. The strategic, operational and tactical situational awareness developed from airborne surveillance enables not just air activities, but is fundamental in the conduct of our land and maritime operations, as well as in the activities of many other governmental agencies.

To manage the battlespace, the area where all land, sea and air activities of interest occur, requires Air Force to possess a number of recently introduced key systems. Our Vigilaire command and control system fuses of 245 different inputs from 45 systems varying from ground based to space based systems. Vigilaire has been operating since December 2010.

Wedgetail. The other significant capability besides JORN is the Wedgetail, Airborne Early Warning and Control aircraft. I am pleased to advise that Wedgetail is on track to achieve its initial operational capability later this year.

Wedgetail represents a fundamental shift in airborne surveillance technology and although not often seen by the Australian public, it truly is a game changer in its ability to control the battlespace. By providing situational awareness across huge swaths of the battlefield, simultaneous tracking of airborne and maritime targets, control of air defence assets, communications relay capabilities and surveillance of the electronic spectrum. Wedgetail will significantly enhance our capacity to control and protect Australia's land, sea and air environments.

AP-3C / P-8. Alongside the introduction of the Wedgetail, I am also pleased to report that our program to replace the AP-3C, our maritime surveillance and response capability, continues to be on track. As I have alluded, the maritime environment is central to our way of life and for many years the AP-3C has played a critical role in securing our sea lines of communication. Its replacement, the P-8 Poseidon is a highly capable maritime patrol and strike platform, which alongside its essential adjunct, the Multi-mission Unmanned Aerial System, will continue to secure our maritime and land environments. In fact as we speak a USN P-8 is in Western Australia participating in Exercise TAMEX with our Navy and Air Force and will visit Canberra later this month.

Strike

Thirdly, we strike things on the land and sea, from the air. The ability to attack prescribed targets with precision, effectiveness, and potentially lethality, is a critical element of what Air Force brings to the Joint fight.

We proved the effectiveness of this ability during the 2003 deployment of our fighter aircraft to the MEAO. Whether the task is responding to troops in contact, suppressing a command and control node or striking a maritime surface combatant, effective and lethal combat air power is available to protect Australia's interests when needed. Strike, normally the most visible activity in any conflict, has a large impact on an adversary's ability to fight, but it also is the most risky.

JASSM. The introduction of the standoff weapons such as the AGM-158 Joint Air-to-Surface Standoff Missile (JASSM) reduces the risk to our strike platforms from air and ground threats and provides us for the first time the ability to hold at risk a range of regional targets across our strategic environment from an extended stand-off range.

JSOW. JASSM achieved its Initial Operating Capability on the Classic Hornet in December last year and alongside the AGM-154C Joint Standoff Weapon JSOW on the Super Hornet fills Australia's strike capability needs previously provided by the F-111.

This is a significant capability that alters the calculus of power projection in the region. Our operating environment is not becoming any less complex and we see no reason to expect preparedness requirements to reduce. The requirement to maintain persistent air coverage in most operational environments is a key element of our preparedness.

Control of the Air

Finally, but importantly, the most fundamental thing we do is to control the air domain. Without control of the air all land, sea and air operations remain at substantial risk.

F/A-18. Air power's primary role is, and always has been, control of the air. Our ability to ensure freedom from air attack enables our land, air and sea forces the freedom to manoeuvre as well as the freedom to attack. This ability is delivered by our upgraded classic F/A-18s, and more recently the Super-Hornet, enabled through our ISR and Battlespace management capabilities.

Why 5th Generation? I am frequently asked the question; Why are 5th generation fighters so important to our future security?

Our approach to high-end war fighting capabilities is to ensure we can achieve a level of lethality and survivability that exceeds those of past, present, and future potential adversaries. While I cannot predict the future, one important lesson I take away from history is that the next conflict may not look like any of the previous ones.

Planning to fight the last war is a fatal mistake for any nation. We need a combat system that delivers on our prime responsibility, that of control of the air, across the entire spectrum of conflict. If you chose not to have control of the air across the range of potential crises, you commit yourself to the belief that you have a choice in all the fights you undertake; though history unfortunately may not back up this belief. A strategy of winning only some of the time undermines the essence of national security. 5th generation aircraft provide Australia the

capability to succeed in the air across the spectrum of conflict, and for Australia, the JSF is the weapon system that will provide this capability for many decades.

Red Flag. Now in my view, there is probably a little too much made of the stealth in 5th generation characteristics as the defining characteristic. The secret of success in air combat is really about the overall situational awareness of the proponents.

What I define as situational awareness is the ability in the cockpit, or formation, to determine what has happened, what is happening and what might happen. The intersection of the three tends to be a reasonable description of situational awareness.

My best example of situational awareness came from when I had the privilege of participating in a Red Flag Exercise.

Red Flag is a large scale air exercise designed to give aircrew an experience of the first five combat missions in a large scale conflict. As you can imagine it is the most complicated airborne training available to undertake in the ADF.

It takes place in the deserts of Nevada over a two or three week period and involves a dedicated and highly qualified opposition forces (Red Air), often involving upwards of 120 aircraft. The missions often involve getting packages of aircraft, strike and transport, through a very complex air defence environment to series of targets

I had the opportunity to fly in an opposition Red Air F-15D fitted with a sophisticated EW jamming capability. I was looking forward to being on the mission having been on the receiving end of "Red Air" over the years. However, instead of witnessing the normal attrition of a strike package I witnessed a demonstration of the superiority of the fifth generation aircraft.

What I didn't account for was the effect of the eight escort F-22s. The good thing about Red Air is that you are allowed to regenerate if you suffer a simulated kill.

So what happened? Well we advanced into the airspace about 40nm and were killed with no idea who or what had caused our demise. We regenerated and the next time only advanced 20nm. We regenerated a total of 5 times and only advanced a maximum of 40nm into the airspace; such was the dramatic superiority of a 5th generation aircraft.

Post flight I was then fortunate to view the engagement from the viewpoint of the F-22 formation. The level of situational awareness was dramatically different. The F-22 pilots had a complete gods-eye view of the battle space and the differences between the benchmark 4th generation aircraft and a 5th generation aircraft were quite stark. It is this situational awareness that determines who wins and who losses in the fight for control of the air.

Now winning or losing one element of a operation may not sound pivotal to the overall success of a campaign, but it is worth remembering that the last Australia soldier to be killed by an air attack was in 1943 and it was a *Kamikaze* attack on HMAS Australia in January 1945 that saw the last Australian sailor to die from enemy air. Our opponents in every conflict since have not been so lucky.

I agree with the old adage - 'With control of the air, you may lose; but without it, you most certainly will.'

This lesson remains as valuable today as it was in the past. Gen George Kenney who was MacArthur's air Component commander once said; 'Air power is like poker. A second-best hand is like none at all - it will cost you dough and win you nothing'.

MEAO Combat Air Patrols. This brings me to the importance of capacity to Australia's future security.

At last month's Air Power Conference I indicated that capacity counts almost as much as capability during combat operations and I turn to a real world experience as an example.

One of the key requirements of Operation Iraqi Freedom was Control of the Air and it is instructive to look at the Combat Air Patrol (CAP) missions set up for the campaign. I was involved in the planning of the air operations and one of the foundations of the whole campaign was the CAPs that enabled the land forces to achieve their objectives, as well as the protection of the ISR assets and naval task elements. It was determined that three Combat Air Patrols were required over Iraq, 24 hours per day, seven days a week. Australia's contribution was 14 F/A-18 Hornets from 75 squadron. Our responsibility was to hold the eastern CAP for about 8 hours. To achieve this required 12 serviceable aircraft each day, a feat in it self from 14 available airframes, but remember this was only for one third of the 24-hour period and only one of three CAP positions.

To maintain control of the air across the three CAPs so that all other land and air operations could go ahead unhindered required 155 coalition fighter aircraft to be committed to the air campaign. Control of the air is a numbers hungry operation, but is the most important air power contribution to the joint campaign. It doesn't take much of an extrapolation to develop an appreciation of the potential scale of Australia's fighter requirements.

Consider how many aircraft would be needed to project a CAP over an amphibious task force, as well as an on-call close air support CAP over a combat team. Throw on the requirement to provide protection for other points of vital national interest, such as our oil and gas platforms, the knowledge that maintenance and training reduces the number of aircraft available for combat, and you can easily see that capacity matters and anything less than 100 JSF severely limits the options available to government, as well as our land, sea and air capabilities, and provides only a boutique capability.

Closing

We are, as a people, justifiably proud of our country and clearly we value our way of life, a way of life that is underpinned by trade and secured, ultimately, by the Australian Defence Force. Our strategy to maintain this security into the future, whether at the grand or military level, revolves around our place in our maritime environment. But as history has shown, anyone can predict the future but rarely do these predictions play out correctly. Thus it is prudent that we maintain a balanced force, capable of responding to whatever crisis unfolds, be it humanitarian or major combat. Such thinking of course has been the hallmark of Defence strategy for many years, but it bears reiteration today in the circumstances in which we find ourselves. Air Force is certain of our role in national strategy and in our vital contributions to national security. We have a very clear understanding of what is required of us and what it takes to fulfil those responsibilities.

Air Force, as an element of the joint force, provides the Government with scalable and proportional options that bridge the strategic and operational divide. Whether it is via air mobility or our principle role of control of the air, the men and women of the RAAF are ready to respond to whatever missions the Government places upon us.

I proudly say without reservation; we have the most powerful air force east of India and south of China.

Thank you