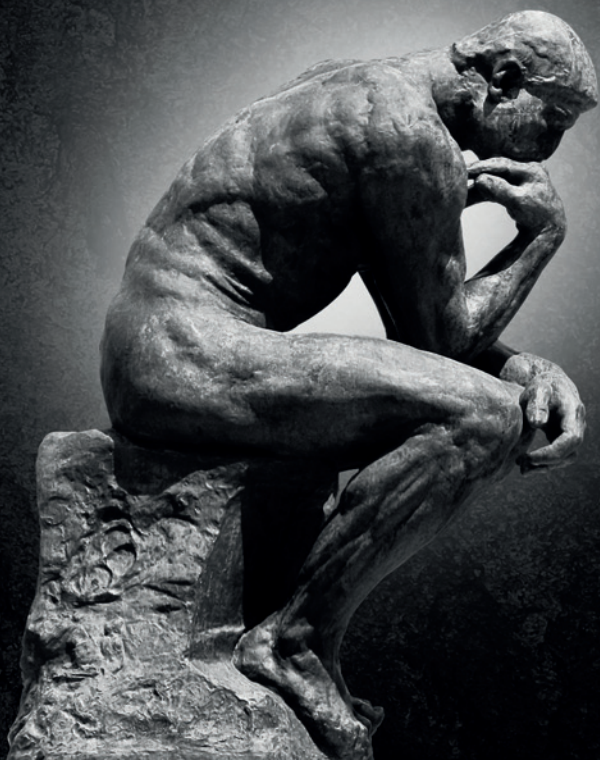


Conference Proceedings



Air Power **Post** Afghanistan



JAPCC Joint Air & Space Power
Conference 2013

Joint Air Power
Competence Centre

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The JAPCC wishes to thank all sponsors for their contribution to this year's Conference and for making it a great success.

A handwritten signature in blue ink, reading "Joachim Wundrak".

Joachim Wundrak

Lieutenant General, DEU AF
Executive Director



Conference Proceedings

Air Power Post-Afghanistan

The 2013 JAPCC Conference was held between 8th and 10th of October in Kleve, Germany. It explored the consequences for air power in the wake of operations in Afghanistan and the geo-political setting of the second decade of the 21st Century.

These Proceedings consolidate the key note addresses, panel discussions and audience comments to form a summary reference of the event and offer pointers for future consideration and development. The document does not record the minutes of the Conference, rather it highlights the

major themes, drawing together thoughts and ideas from all elements of the Conference that were relevant to the main areas of discussion and debate. JAPCC is solely responsible for the written content, but in the spirit of Chatham House Rules, no statements, opinions or ideas are attributed to any particular individual.

The Conference reflected on the air power aspects of over 12 years of operations in Afghanistan; a mission that had evolved significantly during that time in the aftermath of the terrorist attacks of 9/11. Several distinct phases could be identified that demanded differing requirements from air power, and other operations, not directly linked to Afghanistan, but equally important in shaping perceptions of the utility of air power, exerted telling influence on the challenges that airmen faced. Against this complex backdrop the Conference debated the initial conclusions that might be drawn from this decade of continual combat operations – itself a unique situation for NATO.



Despite the desire of some, the key determinant of air power's applicability to future crisis and conflict scenarios would not be what the airman thought but what the politicians and policy makers concluded from their experience and deliberations. The Conference reinforced this point several times and it is right that it forms the first part of this work before the military aspects of recent operations are considered.

The Political View

What the political leadership and policy makers expected from air power was a complex and equivocal debate making predictions of what they might conclude equally uncertain. That this should be the case should come as no surprise. Rarely, have military forces been given such clear direction that operational orders can be cut without significant discussion and debate at the most senior pol/mil levels. It is simply not how things are done. During the Cold War the purpose of air power, its supporting roles and missions, and associated financial justification, were plain for all to see because the nation's of NATO were unified in their view of the threat. Today that situation does not exist with anywhere near the same clarity. Each crisis generates different political perspectives within the Alliance which influences and shapes the air power requirements expected. Thus, the answer to the seemingly simple question – 'What do our politicians want from air power?' is not at all straight forward. Neither, by the way, is the answer to the same question when posed in the Maritime or Land domain. All elements of modern military power face a similar challenge in outlining for their political and policy colleagues the benefits that can be brought to defence and security policy by their respective domain contributions.

However, operations during the past decade have given politicians and policy makers a body of experience and learning that will shape their perspectives and opinions as they progress through their careers in the coming years. Today's junior Member of Parliament will be tomorrow's Defence Minister or Secretary General advised by tomorrow's senior policy advisor

who today is a junior civilian colleague in the International Security Assistant Force (ISAF) Headquarters. Airmen should not underestimate the fact that politicians and their policy makers will make their own determination of what use air power has been based on their own experience rather than wait for an erudite analysis to be offered by the Air Forces of the Alliance. So what might the future senior politicians and policy advisors be thinking?

They may conclude that the link between action and outcome is not as clear cut as some advocates would advise. They would note that intended actions beget unintended consequences that can rapidly become the defining issues of the unfolding crisis. They will draw on experience that kinetic attacks, whilst essential, can disrupt political and diplomatic plans significantly for what may be marginal operational gains. And they will likely reaffirm the already established premise that the control of air power, with its great capacity for destruction and political consequence, is something that requires very close scrutiny and oversight by the political, legal and policy apparatus. All of this suggests that little has really changed as a result of recent operational experience.

At the higher level of defence policy that may be true. Air power, like all military force, will remain part of any nation's military arsenal to be used as is seen fit when a crisis emerges that challenges the interests of a nation or the Alliance. It is at the lower level, where operations are matters of debate and choice that the differences may emerge. Will future politicians be more or less inclined to consider military action? Will they be reassured or made more cautious as a result of their recent experiences? The Conference offered views from both ends of this spectrum and, of course, the answer, if any single answer is ever possible or realistic, lies somewhere in the middle. The conclusion that can be safely drawn is that air power, over the past 12 years, has played a predominantly positive role in all operations. It has proven itself to be flexible, adaptable and reliable. And the airmen and women who deliver it have shown themselves to be courageous and committed professionals who are a great credit to their nations. In the face of such evidence only the most pre-judged view would conclude other

than that air power is a beneficial force and a most useful tool in the nation's military toolbox. However, the question that is far less easy to answer is just how much air power does any nation require?

Many speakers pointed to the economic pressures that now face all Alliance members and their armed forces. Smart Defence, Connected Forces Initiative, Pooling and Sharing, increased co-operation, are all attempts to square an increasingly awkward circle. The quantity of military capability that the Alliance is willing to afford appears to be increasingly out of line with the level of ambition it states it retains. The high level of western defence inflation, coupled with the high cost of western manpower and operational preparedness places NATO air forces in a very difficult position. The balancing of quantity and quality within air forces is a very delicate act. Huge fleets of outmoded aircraft are little more than future casualty lists in the waiting. But micro-fleets of the best, whilst technically capable, are logistically and operationally fragile, and no aircraft can be in two places simultaneously. So how successful air chiefs and air commanders are in addressing this challenge will be a critical determinant of how relevant air power can realistically be in any future NATO strategy. Creating the optimum balance of quantity and quality must be seen as vital ground to be held in the Post-Afghanistan setting. On a positive note, it was highlighted that despite the size of today's defence budgets, the percentage of 'national treasure' required to deliver Alliance air power is very small. Many were struck by this comment and establishing an accurate measure of that percentage could be helpful in addressing the pressing need to better articulate the utility and economy of air power, and its importance to future Alliance and national strategy.

Considerable debate and discussion surrounded the 'air power narrative' and the process by which its advocacy could be taken forward. One of the biggest challenges was the establishment of a commonly held, and strategically relevant, view that would grab the attention of politicians and policy makers. The need to advocate a pertinent view of air power within the joint and multi-agency environment presented further challenges to

airmen. Given the demands of on-going operations, the need for, and benefit of, a broad review of air policy and strategy could be seen as a luxury, or even an indulgence. On the other hand, now could be exactly the right time to take stock and reaffirm the purpose and benefit of air power for the Alliance. This debate, even within the relatively homogenous gathering of the JAPCC Conference, simply highlighted the scale of the challenge ahead. But it was clear that the value of air power to Alliance operational success was something that could not be simply taken for granted and it was incumbent on all airmen to engage and to engender the debate amongst their peers and colleagues. But that would be difficult if airmen did not mix and broaden the engagement to include others in the debate.

One stark feature of the Conference was the homogeneity of the audience. Despite many efforts to broaden its appeal, the Conference could still be accused of speaking to the converted and concluding in an atmosphere of friendly conviction. A renewed effort is needed to take the Conference to the next level and attract a wider and less homogenous audience in the future, one in which serious differences of opinion could be aired and more challenging conclusions drawn. All are encouraged to engage widely and to add to the awareness and consciousness of air power among politicians, policy makers, and commentators. Undoubtedly, this would involve 'political' risk as the message would inevitably be challenged, and in the understandable absence of a general theory of air power, it would also have elements that are discordant. However, a controversial debate is better than no meaningful debate at all! And the goal for the JAPCC 2014 Conference has to be to broaden the debate, embrace contradicting viewpoints, and to secure speakers and delegates who are involved in the formulation of Alliance and national defence and security policy.

In the main, most concluded that air power is seen as an essential part of that defence and security policy and that no politician would be comfortable committing their armed forces without having sufficient air superiority

that the pace and tempo of operations would be controlled by their side. The Air Power 'Paradox', as one speaker referred to it, is that while politicians may hold a positive view, the current macro-economic situation demands that they establish and bolster their nation's vital economic security, and this often occurs at the expense of their military force structure. As airmen, the compelling challenge over the coming years will be to advocate an air power strategy for NATO that best utilized the asymmetric advantage that air power has provided for the Alliance, and that technology and innovation would continue to offer into the future. That advocacy should not be cast as a digital alternative to maritime or land power as all levers of military power are needed to meet the unknown contingencies of the future. Rather it should be cast in a broad context with an ever present eye on the reality and affordability of the case being advanced. The next section reflects on the debate as to what that air power strategy should be to meet the challenges of the coming years.

The Strategic View

One senior speaker spoke most eloquently on the effectiveness of deterrence laying the foundations of a debate that punctuated the Conference. Recognizing the complex nature of today's geo-political setting, the utility of militarily-derived deterrence was examined, and the validity of deterrence as a policy lever was questioned. Partly this arose from changes in contemporary society stemming from distributed social media, the attendant growth in 'international' friendship and kinship and the weakening for some of traditional state and national identity, the role of the 24-hour news media, and its impact on the nature and conduct of national political and wider western democratic processes. All these factors had, it was argued, changed the spectrum and matrix of risk that Alliance governments must now consider and thus was influencing their preparedness to use force for crisis resolution. The shift from state based conflict to state versus non-state actor or terrorist organization had also had a significant effect. With the Alliance increasingly facing opponents whose values differed so markedly from western society, it was difficult to



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pinpoint the 'target set' that if held at risk of attack or destruction would create the necessary leverage that was essential to make deterrence effective. Against this backdrop, the roles and missions that air power, and other military arms, had traditionally undertaken were increasingly in need of contemporary adaptation.

Central to any such adaptation was the need to consider which lever would have the greatest impact on the opponent. Some argued that this was fear; and that despite religious beliefs over the promise implicit in the afterlife, all humans were motivated to avoid premature death. If so, it was proposed, holding persons at risk and making them aware of the constant danger in which they lived, would offer a deterrent effect that could underpin broader deterrence. This strand of debate echoed early air power thinking on 'Strategic Interception', the direct attack on the enemy's sources or roots of power, and was proffered as a theory that could have greater contemporary relevance. Many agreed that holding the enemy's source and legitimacy of power at constant risk should form part of any future

multi-faceted approach to Alliance and National deterrence. On the other hand, it was cautioned that while this was theoretically achievable the practicalities of it were considerable and the outcome was rarely as predictable or containable as some would suggest. The 'intelligence landscape' was not as clearly mapped or understood as some advocates maintained, and even if it was, it was pointed out that, as in chess, where all is seemingly transparent, the danger of surprise is ever present, and can if one is convinced one has intelligence superiority create strategic shock, e.g. 9/11.

The economic and security challenge posed by the growing number of cyber attacks generated considerable debate as to how air, or indeed any military power could be utilized in the deterrence or defeat of the cyber threat. The enemy's risk appetite was critical. If the enemy held certain assets or capabilities that air power could access as valuable to its own future security and prosperity, then a match between 'target' and 'capability' could be exploited. This, of course, relied on having as sound and real-time an intelligence picture as was possible, and here air power derived Intelligence, Surveillance and Reconnaissance (ISR) would maintain a key role. But if the 'enemy' were devoid of accessible targets, or more likely, located in areas whose attack would be beyond the risk appetite of Alliance members, then alternatives would be required and at that particular moment air power's utility might be limited. But the key phrase was 'at that particular moment', for the risk-reward balance could shift markedly depending on the level of insecurity or incipient danger Alliance nations felt. Clearly the risk perspective on the 10 Sep 01 was fundamentally different by mid-night on the 11th. When such strategic views shift, speed of response, reach, destructive power, innovation and flexibility are highly prized attributes; attributes which air power continues to possess and exploit.

Another key theme of the debate was the importance of air power in what some have called 'war among the people', or more officially counter-insurgency warfare. That air power had been critical in Afghanistan was not disputed, and many highlighted statements by non-airmen that without air power in its many roles, operations in Afghanistan would have

been impossible. One interesting observation was the importance of air power in maintaining the Coalition cohesion through roles and missions that sustained and protected the force and minimized the risk to exposed troop contributions. This force protection and 'force multiplication' through casualty mitigation was particularly effective and, where the commitment of nations to any military endeavour can be significantly influenced by even small casualty events, it produced Coalition effects that were clearly of a strategic nature. It was thus a moot point whether it was the kinetic attack against a key enemy individual or the battlefield Troops in Contact (TIC) intervention and Medical Evacuation (MEDEVAC) that contributed most to the operational development of the campaign. Given that time is often the most critical resource needed to deliver successful Counter-Insurgency (COIN) operations, maintaining Coalition support and the cohesion could easily be argued as offering the greater contribution. But the argument should not be seen in such simplistic or absolute terms. The more important theme to draw from over a decade on hard fought operations in Afghanistan is that air power, air commanders, and air men and women, have shown themselves capable of successfully adapting and innovating within the mission, and have achieved rightful recognition of the important role they have played.

However, caution was expressed against the assumption that these lessons had been 'learnt'. The importance of highlighting the joint and integrated role that airmen had contributed was raised, as was the pressing need to maintain the teamwork and relationships that would underpin the development of any future air strategy to support joint operations. Reverting to environmental silos until the next campaign broke down the walls of unfamiliarity and prejudice was considered a real danger and one that only continual engagement, conversation, exercising, training, and proper co-operation, would avert. Within this context the question of Air Command and Control (Air C2) was raised by some who argued that the current Component model militated against close and integrated planning and execution. As is normal whenever this topic is raised there were as many speaking for the motion as were opposed, and it is almost impossible to

define a scenario that meets totally the requirement of any one approach. Indeed, during operations in Afghanistan the construct of Air C2 was in an almost constant state of flux as new operational demands created new C2 designs to meet the new challenge. The most important skill when considering Air C2 was an informed and open mind that could design, mould and advocate the best C2 design for the campaign at hand under the conditions relevant at the time, and importantly leave flexibility for further adaptation as the campaign developed. And any suggestion or desire that the C2 construct should be used to establish or underpin the air component's joint status would compromise operational effectiveness, undermine joint reputation and cast the advocates in a dim political light. For that reason alone, the impact of operational and tactical interaction at the component and joint level had a direct bearing on the reputation and standing of air power and airmen at the strategic and political level; an important point to bear in mind when attempting to advocate the case for air power – tactical actions had strategic effects.

Overall, an exact definition and description of NATO's Air Strategy in the end proved elusive, but most concluded that what air power and airmen were currently doing was in tune with the needs and demands of current operations. The pertinent question was whether it would continue to maintain its relevance. As was pointed out by more than one speaker, the force structure that Alliance air forces would operate during the next quarter century is either in place or about to be delivered to service, thus the continued utility of the air arm was more a matter of innovation and adaptability for its operators and commanders than to the advent and fielding of new technological capability. It is, therefore, an intellectual challenge that airmen face rather than a technological one. Air power's inherent flexibility, speed, and reach, provided the essential components of the air strategy that are necessary to enable the 21st Century airman to fashion a proper capability for the future strategic and operational challenge. Moulding operational lessons with emerging strategic vectors is, therefore, the challenge at hand; the Conference moves on to offer insights into one aspect of this critical area.

The Operational View

The key operational discussion focussed on the role, utility, legality and morality of the ever increasing use of remotely operated military vehicles. This form of warfare had developed considerably during operations in Afghanistan, although developments had clearly not been defined in that operational area alone. Concurrent activity in, e.g., Iraq, Yemen, Libya, and the Horn of Africa, had all advanced the development, capability and integration of Remotely Piloted Vehicles (RPV). Air operations of the future would inevitably involve a growing contribution from the RPV inventory, but as the Conference Guide suggested, all was not settled in terms of the policy, planning and operation of this new means of air warfare.

Whilst many saw RPVs as the natural and logical extension of technology, others saw a far more worrying and possibly sinister aspect to the use of 'drones' for 'remote killing' and 'robotic warfare'. The heated language does not help as it skews the debate into one in which firm and strong stances are taken. The point often made was that just because the aircraft was pilotless did not make the overall system unmanned or remote from proper oversight. Indeed, the nature of RPV control actually made oversight more accessible and enabled broader and more inclusive decision-making, including legal and policy representation. Thus, in many ways RPVs offered many benefits for the oversight of military operations which campaigners for the more direct political and legal control of warfare have long sought.

It was clear that confusing the 'means' of warfare with its 'ends and ways' was bedevilling the RPV debate and distorting profitable discussion. RPVs were argued to be no more than a new 'means' of warfare that were being used to conduct the traditional 'ways' in pursuit of today's political 'ends'. The RPV was simply a new aircraft type undertaking traditional roles and missions. A man remained 'in-the-loop' and the access of decision-makers was greatly enhanced. Moreover, RPV numbers are steadily increasing and a more generally accepted view of their role and associated operation needed to develop so that the 30–50% of air force combat aircraft fleets

that RPVs are planned to comprise in the future, could be effectively utilized. RPVs were seen as a 'means' of military activity that was entirely legal and morally equivalent to traditional forms of warfare conducted under the laws of armed conflict. Nonetheless, there was much differing opinion in wider circles on this point and the matter was far from settled.

For some, the development of the RPV reflected the 20th Century enthusiasm for the aeroplane and its influence on warfare. However, the 21st Century media, especially 24-hour news, flourishes on the creation of controversy and fear. The fear of 'robotic warfare', often called the 'Terminator Scenario', played strongly to those who would place the RPV in the same category as the land mine or cluster bomb, weapons that inherently contained the ability to inflict indiscriminate casualties amongst combatant and non-combatant alike. But RPVs, as currently envisaged, do not conform to that prejudice, indeed as has been highlighted; they actually contain the means to minimize unintended effect more than any other



current weapon system. However, it was difficult to tailor the effects from RPV operations because the 2nd and 3rd order consequences of action were often generated in an area remote from Alliance or Coalition presence. This allowed those targeted to take the upper hand in the media debate surrounding a 'drone' attack. So, despite using an RPV to minimize the destructive impact in a complex political setting, the consequence of using an RPV was often to increase the political complexity it sought to reduce.

Western monopoly on the use of advanced RPVs could lead to planning and concept development that assumes this will be a continuing trend; it may, however, be dangerously short-sighted. Recent Alliance and Coalition operations have all taken place against the background of an asymmetric threat where the West takes the role of the superior technological combatant facing the technologically inferior foe, and in which air superiority or even supremacy are an expected given. Indeed, a survey of recent defence procurement and reduction decisions by Alliance members would suggest that the possibility of peer level conflict is increasingly seen as remote, or at least remote enough for strategic risk to be taken. But is this inevitability inevitable? History would suggest not as almost every new conflict comes as a surprise to the participants.

NATO has come of age in the RPV world during Afghanistan but much thinking and policy making remains. How would NATO react to the widespread use of RPVs by their future opponent? Internally, having acquired an Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) RPV capability how will NATO address the possible demands for the development of armed RPVs to complement its established capability? What protective measures are required for the remote operators of RPVs? And what view will Alliance nations take when other advanced nations enter the airspace of a sovereign nation and conduct attacks aimed at eliminating the senior figures in organizations against which they are in conflict? These questions need to be resolved over the coming years and airmen must engage in the debate and ensure their views and experience are heard and considered.

The Joint View – Independent or Interdependent Action?

For any form of military power to be relevant it had to offer options, opportunities, and solutions for the joint force commander, whose task is to deliver the Alliance political outcome implicit in the North Atlantic Council (NAC) tasking directive. This direct link between political will, operational design, and tactical action, has to be at the heart of the airman's thinking in the Post-Afghanistan setting. An understanding of the Joint Force Commander's perspective is a key stepping stone to greater understanding of the future roles that air power should develop and offer.

The Joint Force Commander sought collaboration, co-operation and innovation from his subordinate components, coupled with minimized resource demands, minimal exposed footprint and the ability to adapt to the changes, phases, and demands of an unfolding campaign. Airmen have a good story to tell but more could be done. Some roles and missions have naturally drifted away from main effort during the Afghanistan operation. Traditional roles, such as, Chemical, Biological, Radiological and Nuclear (CBRN), Ballistic Missile Defence (BMD)/Theatre Missile Defence (TMD), Electronic Warfare (EW), and Air Defence (AD), both ground and air-based, has not been in great demand but could be essential in many possible joint scenarios. The ability to continue to operate in the face of heavy electronic disruption was highlighted by several contributors who urged the continuation of the 'Competitive Edge' that air power had delivered to the Alliance since its inception. Maintaining this competitive advantage was seen as much as an education and training challenge as it was a technological requirement.

A key feature of any joint campaign design and management would be the need to establish and operate a smooth and effective C2 structure. The plan for the NATO Air Component to exercise C2 from Ramstein, with liaison elements forward in the operational theatre, was challenged on the basis that it might not allow for sufficient influence and liaison to be undertaken in the forward area. On the other hand, the need to be at the

heart of the ISR net and possess theatre-wide and robust connectivity argued in favour of the Air Component's current plans. It was highlighted that no C2 construct was immutable and that the key feature the Air Component was striving to achieve was to maintain the maximum connectivity, given current Alliance investment, whilst exercising the most effective Air C2 for the whole joint force. Afghanistan had focussed very much on the needs and demands of air-land integration, future conflicts, as seen in Libya, would demand close air-maritime co-ordination or balanced air-land-maritime effort, which inevitably would be more complex than the C2 models created over the past decade. A balanced and flexible approach will be required; the challenge for airmen will be to study the campaign requirements and devise the best Air C2 structure to support the joint and sister component commanders. That requires study by and mentoring of younger commanders as they rise through the ranks to ensure they are ready for the demands of higher component and joint command.

Many highlighted the pressing need to exercise expectation management of air power within the joint setting. Airmen have been criticized for claiming a wider capability than events have shown to be the case. Nonetheless, air power remained at the heart of all joint activity and was a, if not the, critical joint enabler. However, with force structures shrinking, the demands on each air asset will grow. A solution could be to tighten the control of air assets centrally in an effort to extract the maximum from each platform through strict time bounded allocation. Modern management techniques would argue for this approach. However, Afghanistan had emphasized the benefits of organic support, end-to-end planning and delivery, personal operational linkages, and the advantage that could be gained from the co-location of the air and land elements. This tension between recent experience and the inevitable future resource pressures represented a complex challenge.

It was understandable and natural to feel more comfortable and reassured if one's fighting companions were known and it was possible to meet them face-to-face. Very few people are truly comfortable with the remote

provision of a critical capability if the providers of that capability are not part of 'the team'. Consider the nervousness there would be in any football team if the goalkeeper was to be provided on the basis of 'pre-planned, time bounded, intelligence-led resource allocation' from other games going on in the park! Whilst it might be efficient in the management of goalkeepers, the consequences for failure would only extend to the loss of a game, not so in the case of combat operations. However, insufficient air force structure exists, or is planned to exist, to allow for the establishment of discreet air-land combat teams that would satisfy people's natural desire for tactical self-sufficiency. This debate is often portrayed as a difference of command philosophy between 'people-focussed soldiers' and 'technologically-myopic airmen'. There may be a grain of truth in that assertion, but the real challenge for the airmen is to ensure their force structure is utilized in the most effective way not just for the air, land, or maritime component but for the joint component as a whole. That requires the airman to have an intimate understanding of the joint commander's plans, concerns, and desires; perhaps an even greater sensitivity than his land or maritime colleagues whose force elements cannot be re-roled or re-allocated as is the case for the air. It is this adaptable and flexible multi-role aspect of air power, coupled with its discreet episodic operational pattern, which demands that airmen be equally adaptable, flexible, and multi-role in their thinking, execution, and C2.

Beyond meeting the integrated needs of the joint campaign, the air commander could also offer effects beyond the close battle as an independent act. This concept echoed themes from the birth of air power and the desire of many early advocates to find a way of conflict that reduced the horrendous casualties of static land warfare in the age of deadly and extended range firepower. This natural and humane ambition led many to advocate a way of warfare that reduced the need for force-on-force land combat by striking at the heart of the enemy's political decision-making, will and productive means to fight. However well intentioned such advocates were, the means and ways of air warfare simply did not exist at that time to allow them to achieve their goal. And since the end of the Cold

War the concept of 'total war' has changed the military environment making casualty avoidance, strictly controlled destruction, close media and public oversight, and the application of peacetime norms to the battlefield, a completely different operational landscape to the one faced by the early practitioners of aerial warfare.

However, the use of air power in a coercive role still had utility, even if the attachment of the descriptor 'independent' or 'strategic' added little to wider understanding. The Conference Guide pointed out that the striving by airmen for an independent role was linked to their desire for an institutional independence from their navy and army colleagues. Today, such confusion of purpose does not help the important debate concerning the pressure points against which air power should be applied. The need is to ensure that those activities that air power can undertake, and which take place without direct interaction with land and maritime colleagues, are realistic, effective, economical, and clearly articulated within the joint arena, where the cost-benefit of the activity can be assessed properly. The goal is not to create an exclusive activity that others watch in awe and applaud, but to undertake roles and missions that are critical to campaign success and which air power is uniquely fitted to perform. So what might those roles and missions be?

Coercive air power is not a new concept but perhaps a number of factors are coinciding that make a reappraisal of its utility useful. The 10 year period from 1991–2001 has been referred to as the 'Decade of Coercive Air Power' embracing the 1st Iraq War, the Iraqi No-Fly Zone policing, and the conflicts in the Balkans. However, all these conflicts were 'settled' only when troops were deployed in sufficient numbers to compel a conclusion. No one can deny that air power shaped all of these operations decisively, the 100 hours of ground combat in 1991 was a fraction of the time expected at a fraction of the cost anticipated, but is it reasonable to argue that the conflicts of this period were solved by air power. Almost certainly it is not and a more nuanced description of air power's role is required.

In many ways this acknowledges the fact that is true for all military force – the relevance of air power is highly situational. Some may argue that this is intellectual cowardice in that it must be possible to describe those situations in which one would turn to independent air effect to take the lead in conflict resolution. But it is extremely difficult, if not impossible, to summarize any such scenario. All warfare is highly situational, demanding situational solutions. The consequence for democratic structures, such as NATO, is that they will inevitably be responding to a crisis and as such they will not set the starting conditions. Against this background, the Alliance must possess a quick reaction containment capability, an ability to gain operational understanding, and the means to deploy and sustain the relevant joint force in the operational area. Without these basics in place, grand schemes of manoeuvre and complex campaign plans will amount to nothing. Fortunately, air power offers capability in all these areas and because of its speed, reach, and flexibility, is able to respond rapidly and in force, and thereby signal the changed political circumstances that NATO's engagement in any crisis will bring. This is coercive air power, but it is not an independent war winning solution. However, it is an example of air taking the initial lead on behalf of the joint force. It is a utilization of the unique capabilities of air power that brings initial stabilization to a crisis and sets the conditions for further operational development. It may be that the demonstration of force is sufficient to curtail the crisis at that point, if so that would be a very welcome outcome. More likely the crisis will develop through shaping, decisive, and post conflict phases, until the trouble is sufficiently resolved to re-establish the norms of decent society. The concept of winning, in which 'surrender' is taken and the defeated are vanquished, is a concept which sits awkwardly with today's geo-political reality. Air power and its advocates must develop nuanced but flexible arguments that fit with today's political requirement.

In the margins of this discussion the view was aired by several speakers and panellists that airmen would be better served setting their activity against a broader joint backdrop. In the battle for future resources, the environment that was better able to cast its activity as an essential component of

the activity of others would undoubtedly find itself in a stronger position. Far better, it was argued, for soldiers and sailors to speak of the benefits of air power, than for the airmen to be painted as fundamentalists of their own institutional bias. Listing those activities for which the air commander bears almost sole responsibility: BMD, air superiority, space access, air traffic, spectrum management; or makes a very significant contribution: ISR, deep land and maritime attack, battlefield attack, cyber defence and attack, and Combat Search and Rescue (CSAR)/Medical Evacuation (MEDEVAC), it is difficult to see why airmen should debate so extensively the need for an independent role for their environment.

Nonetheless, this debate continues and the Conference, whilst airing many of the arguments, came no closer to settling the matter than the many previous attempts. And that is perhaps the best outcome, for it is in the debate that the value lies. The discussion of ideas challenges template solutions and false dogma; it keeps open the solutions that inevitably will be as much defined by operational circumstance as by the airmen's theoretical and doctrinal analysis. The tone of the Conference suggested that more were persuaded, after having been immersed in the joint environment, that air power would be better served by emphasizing its interdependent role within the joint structure, than by continually seeking to push its uniqueness and independence from its sister services. Thus, ideas that developed and espoused Interdependent Air Power are what is needed in the Post-Afghanistan era.

Delivering Quality with Reduced Quantity

While much of the Conference focussed on the battle of ideas and the determination of what the past suggested about the future, the final session looked at what could be done now to continue the process of adaptation, innovation and preparedness. In a time of reducing defence budgets and by implication force structure, it was essential that the force structure that existed was as well prepared, organized, and integrated as possible. This strand of delivering quality was encapsulated in NATO's

Connected Forces Initiative, or the Pooling and Sharing advocated by the European Union (EU). But these high level programmes needed detailed co-operation and action to deliver the desired outcome. Pleasingly, offers were made for nations to join national and multi-national initiatives to combine and consolidate shared training. The challenge of maintaining training opportunities was likely to be further pressurized by the return of forces from Afghanistan and the attendant reduction in pre-deployment theatre-training once the ISAF mission ceased. Whilst no one would seek combat to deliver training, it was a fact that the focus and priority that accompanied operational deployments raised standards and gave greater purpose and immediacy to any operational training. It also made it more straightforward to argue the case for investment. Beyond 2014 that situation would change making it critical that new thinking and innovation be applied now to the education and training of Alliance forces.

Of key importance was the need to set relevant and achievable standards supported by agreed terms and nomenclature. Pressure was also needed at the higher level to deliver collaborative programmes that would reduce costs and enhance capability, even if associated with a marginal loss of sovereignty. These initiatives would need to be factored into the national resource debate to ensure, as much as was possible, that reductions in quantity were not made without an understanding of how quality could be enhanced to mitigate the force size reduction. The linkages implicit in this argument needed to be widely understood and needed to be at the heart of any resource or structural planning debate; airmen needed to ensure this point was clearly understood. While applicable to all forces it was particularly apposite to navies and air forces as they consisted of small numbers of multi-role capable platforms that were time allocated to a variety of missions and tasks; developing close links and greater understanding and support between these two services could be helpful.

The relevance of military professionalism, and its importance to the maintenance of quality was a recurring theme. Education and training needed to gain academic accreditation and to be valued as an essential part of

any service persons development and fitness for promotion. Informal networks of colleagues, mentoring of the junior by the senior, *ad hoc* field study, and wider scholarship, were all seen as important strands of any future education and training regime. Funding must follow ambition and here more work was needed to secure the vital resource that would enable this critical activity to take place. This would only come if airmen spoke with a more coherent voice and emphasized that quality had a force multiplying effect far in excess of the simple arithmetic surrounding training costs.

Much of this document has reflected the need for deeper understanding, better advocacy, innovative thinking, confidence and co-operation, perspective and collaboration, and the need for airmen to possess a thorough understanding of their environment, particularly in the context of the political, strategic, and joint priorities that will guide their operations. This cannot be accomplished by people who had not undertaken a significant amount of study, education and training; and it would be unreasonable to expect them to do this without professional support. Thus, while education and training budgets may be seen by some as soft targets for low profile reductions, they actually represent the nurturing costs of the future commanders, operators and operational planners. The loss of their intellectual preparation may not be seen in the same way as a reduction in the number of aircraft on the flight line, but its effect will be greater and more enduring. Confidence is a key part of moral, and in part it comes from the knowledge and certainty that one is part of an organization that is prepared for the unknown. Failing to deliver the education and training that is so essential to military preparedness and adaptability would have a serious impact on confidence and weaken the resilience of any military force, with ultimately serious consequences come the outbreak of future conflict.

It was widely accepted that it was the responsibility of all airmen to do their utmost, through formal and informal initiatives, to ensure that the personnel for whom they had responsibility were provided with the best

education and training that was possible, regardless of the difficulties involved. This was an area where individual action and innovation really could have a real and immediate effect. Much needed to be done, and it would be useful if more co-ordination were made available, but attendees were unanimous in their support for any initiative that would advance education and training and thus secure and enhance the quality of Alliance air forces.

JAPCC 2013 in Perspective

The 2013 JAPCC Conference set out to examine the air power implications stemming from 12 years of combat operations in Afghanistan. The goal was to identify the pointers to the future that have enduring relevance and to note for future reference those circumstantial aspects that while important, are also the consequences of action in that particular region, at that particular time, against that particular foe. Did it achieve its aim?

The principle of political guidance of Alliance military activity is sacrosanct in NATO thinking, and as such it places a huge premium on understanding the political priorities, concerns, and ambitions. The Conference achieved this only through the second hand knowledge of various senior military participants, making the securing of in-post Alliance political figures, their close advisors, or Assistant Secretary Generals a key goal and priority for 2014. Nonetheless, the 2013 Conference offered many pertinent insights into the political perspective and placed air power's contribution to Afghan operations in a proper perspective. Afghanistan will not be 'won' in 2014 but it will be a significantly altered country, one where the norms of world society are more apparent, where education and healthcare are more accessible, and where elections and the rule of law are embedded in the political culture. These are all major advances, which when coupled with the enormous efforts that have been made to develop the Afghan security forces, represent a very positive outcome for the Coalition. The future holds many challenges that will be the task of future force structures and diplomatic activity, but ISAF can sensibly reflect on a very difficult task well done.

Against that background it would be unrealistic to find definitive evidence to support any one political perspective on air power. Politicians and their advisors will look to their armed forces, as a whole – the joint force, to deliver the outcomes they desire. And military men should not expect too much definitive guidance. Past wars have rarely seen this happen and today's complex geo-political landscape does little to encourage it. Setting specific end-states is all very well in staff college exercises but it has little resonance with the reality of contemporary politics. Thus, airmen should focus their contribution toward the joint team and the joint outcome. The cross component benefit that air power can exercise should make the airman everyone's 'operational best friend'.

From the political directive the strategic design will naturally follow; the Conference debated the nature of the air strategy that the airman should advance. The spectrum of views was notable with some championing an air approach to others advocating an integrated and joint solution. Of course, all were correct, for the circumstances of the future conflict were not defined and without that clarity no firm conclusions could be reached. Indeed, the debate varied so widely over possible future military strategies that defining a specific air power strategy would be challenging. However, key themes did emerge from several of the presentations and panel discussions. The enduring attributes of air power and air arms, speed of action, reach, firepower, perspective, adaptability and flexibility, and importantly, the speed with which roles and missions can be switched and matched to the campaign needs, all argued that the air environment possesses the fundamental building blocks of future campaign design. Air power's centrality to virtually all military activity, regardless of the subordinate question of asset ownership, made it a fundamental pillar of joint operational planning. Any attempt to define a specific air strategy must incorporate the flexibility required in the joint plan and the flexibility inherent in air power.

Operationally, Afghanistan was notable for integrated air-land operations and the burgeoning development and use of the RPV. By the end of the mission the level of air-land integration was outstanding but the journey

to that point was perhaps the most significant aspect. Virtually all the currently praised aspects of air-land operations have their antecedence in previous conflict. TIC support was a daily feature of bi-plane operations in the First World War. Combat ISR was equally seen on many battlefields by 1918. Air policing and vertical envelopment were features of 1920s operations in the Tribal Areas of the North-West Frontier Province and covert operations and support came of age during the Second World War. Add to that battlefield mobility, tactical and strategic MEDEVAC, air re-supply, and wide area surveillance from Korea via Vietnam, the Gulf, and the Balkans, and it is clear to see that the current activities are firmly rooted in the demands of the past. The real lesson from Afghanistan is the time and effort required to re-invent some of these capabilities and to break down prejudice against their adoption. This is not a matter of technology; it is a matter of the mind and the education and training and professional pre-disposition of the airmen involved in the debate. In many cases innovation flourished but there were other occasions, for example, in the integration of air and land tactical planning, when things were not as smooth as they could have been. That all was well in the end was reassuring but in a higher tempo conflict against a near peer opponent how well would the Alliance have fared?

The growth in the use of RPVs characterized the campaign and initiated a major debate about their use, morality, legality, and utility, which looks set to dominate the coming years. The Conference examined this matter in detail and laid sound foundations for further debate in the years to come. Nation's need to pay significant attention to this subject as, with NATO soon to field its own Unmanned Aerial Vehicle (UAV) ISR capability, the pressure for armed UAVs in the future is bound to grow. The roles and missions performed by RPVs contributed to the debate surrounding the independent or interdependent air power. Most perspectives were well ventilated but the predominant mood was that air should place itself in the broader joint context and emphasize its vital contribution to the joint campaign objectives rather than advocate a separate and unique identity.

Air power is barely 100 years old and throughout that time there has been a quest among some to codify a 'Universal Theory of Air Power' in a manner similar to Einstein's 'General Theory of Relativity'. But Einstein's theories have been challenged and have evolved as part of the continual renewal and adaptation that is the bedrock of scientific research. Theories are only true until another theory is developed to disprove or adapt them; so too in air power where 'true thinking' has had to evolve as the political, public, legal, technological and media norms have changed and evolved over time. That there has never really been a description of the 'Universal Theory of Air Power' suggests that it either cannot be described, or that by the time events have been distilled into theory, the defining circumstances and factors have created new priorities that demand new solutions. Perhaps it is better to view air power as a 'living' organism adapting and evolving to meet the needs of its contemporary environment. As an organism that will continue to avoid extinction so long as intelligent adaptation takes place and it continues to be of value and benefit to its fellow institutional creatures. Whatever metaphor one uses attempting to fix air power as a fundamentalist principle and creed seems to offer limited benefit.

In retrospect, the Conference achieved its aim and explored the key areas concerning Coalition operations in Afghanistan. No final conclusions were reached, nor perhaps should they have been; but the debate exposed delegates to the complexity and equivocal nature of contemporary operations. The discussion on air power development highlighted the vital requirement to maintain and enhance force quality through education and training. Perhaps the final reflection is the clear need to broaden the debate, embrace a wider audience, engage with those less sympathetic to the airman's view, and to better advocate the established principles which define Alliance air power. Those principles are common to all air arms but it is the thoughtful application of those principles that separates the effective from the non-effective. All airmen have a part to play and the 2013 JAPCC Conference laid out a way ahead for debate and action – the Conference of 2014 will continue the journey.



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