

***FROM PAST TO FUTURE:
THE AUSTRALIAN EXPERIENCE OF LAND/AIR OPERATIONS***

***THE AUSTRALIAN EXPERIENCE OF LAND/AIR OPERATIONS:
VIETNAM***

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A description frequently applied to the Vietnam conflict, both at the time it was being fought and in subsequent years, was that this was 'a ground war'. How ironic then that Australian forces committed to that theatre between 1965 and 1971 were routinely inserted and extracted—both strategically and tactically—and in between sustained, all from the air. As well, the troops engaged in combat were supported by an air power presence, the level of which has been variously categorised by terms such as 'generous', often 'massive', and sometimes 'lavish'.

Of course, by opening an address in a forum such as this I am deliberately being provocative to make a point. We all know that the foe faced in South Vietnam was essentially a ground-borne one; occasionally he took to boats—though never beyond inland waterways or immediate coastal fringes—and he definitely never possessed offensive, or even defensive, aerial capabilities. The advantages conferred by air power in support of land operations were wholly in the allies' favour, and without enemy-imposed impediment beyond small arms ground fire until very late in the conflict. Yet it is one of the contradictions of that most confusing of wars that the benefits of this situation failed to produce the decisive military outcome everyone might have expected.

In this session today I do not propose to canvas in detail the big issues regarding whether air power was correctly used in Vietnam, particularly with respect to operations which attempted to carry the war into the enemy's home territory north of the Demilitarized Zone along the 17th parallel. Attempting to limit the quantity of fresh troops and reinforcements, along with ammunition and supplies, infiltrated along the notorious Ho Chi Minh trail was certainly an aspect of great concern to allied ground commanders. An air campaign was the obvious and logical means for dealing with the problem. But whether to hurt the enemy by bombing at the source of supply in the north or to interdict at key points along the route through supposedly neutral third countries, or to clobber him as he emerged across the border into the southern republic proper? These were policy questions beyond the scope of purely military advice, and subject to constraints set down by politicians—not generals—and in Washington rather than Saigon, and certainly not Canberra. So let us confine our view to those areas which were directly within the Australian forces' ambit to control, both in determining what was required and how best to meet that need.¹

As already indicated, the extent of the air support entailed in the particular case of Vietnam was considerable. The individual Australian soldier assigned for a twelve month 'tour' there was most likely to have found himself delivered at Saigon's Tan Son Nhut airport within 24 hours of departing from one of the main military bases around Australia (usually Sydney but sometimes Townsville). While the major stages in establishing and building up the ground combat presence in the theatre entailed sea deployments by the aircraft carrier HMAS *Sydney* which had been converted to a troopship, a great many movements as well as the routine changeover of time-expired personnel were accomplished by air.

It has been estimated that approximately half of all Australian service personnel sent to Vietnam were got there by civil aircraft operating under charter from the national flag carrier, Qantas. When 1RAR—the first combat battalion sent—was due to be replaced in 1966 by a larger force (1st Australian Task Force—or 1ATF—comprising 5RAR and 6RAR), Qantas was obliged to provide, at short notice, aircraft and crews to carry out 34 flights over a 10 week period. Understandably, the airline objected that calls made upon it by the Defence Department disrupted its scheduled operations, but as a government-owned corporation it

had little choice but to comply 'in the national interest'. Although the need for this form of air support was heaviest during the changeover of units, from March 1968 until February 1972 Qantas also remained committed to providing a regular weekly service.

The Royal Australian Air Force (RAAF) provided strategic airlift capacity in addition to that coming from civil resources. While bulky and non-urgent cargoes were shipped by Navy transport ships, at Army's request the Air Force began a fortnightly courier service from June 1965 using its C-130A Hercules transports. These carried priority items of freight such as operational spare parts, medical supplies, communications equipment and ammunition, along with that most important adjunct to morale: mail. Although the Hercules was generally regarded as an unsuitable type for carrying large numbers of passengers over very long distances, personnel were carried, too, on a 'space available' basis.

One aspect of the air bridge between the Australian Support Area and Vietnam deserves special mention. This was the need for regular aeromedical evacuation which arose soon after 1RAR arrived at Bien Hoa in mid-1965 and began engaging in combat operations. Initially, use was made of the scheduled courier flights for this purpose, but from July 1966 a special flight was laid on every fortnight—or more frequently if warranted by the number of patients to be moved. This system remained in operation for more than four years, until the reduced levels of casualties saw a reduction in the frequency of evacuation tasks.

The RAAF also found itself involved in periodic troop changeovers, partly to avoid the harm caused to Qantas' normal commercial operations. In 1967, for example, when 5RAR and 6RAR were due for replacement, a detachment of C-130s conducted a shuttle service between Darwin and the Australian port of entry in Vietnam, Vung Tau. Aircraft of the two domestic airlines, TAA and Ansett, then carried the troops from Darwin to other centres further south. The previous December—when some 300 men had to be moved to Vietnam at a time when Qantas was experiencing industrial strife with its pilots—resort had to be made to air transport provided by Australia's principal ally, the United States, to get the troops to their destination.

Although the RAAF was initially inadequately equipped to cope with the type of long-term commitment such as that represented by Vietnam, it was aided by the fact that 1ATF built up to its maximum strength of some 7000 personnel by 1968 only progressively. Also, growth in demand for long-distance transport within Australia's services was foreseen to an extent, with the result that as early as November 1964 an order was placed for an additional squadron of newer model C-130Es which doubled the size of the fleet from mid-1967. This increase, combined with judicious use of civil air assets, saw Australian Force Vietnam (AFV) receive a quite adequate level of support with respect to strategic airlift.

The important point is, of course, that for such a protracted conflict as Vietnam turned out to be, the RAAF could not have coped on its own. Australia's Vietnam adventure needed a substantial measure of involvement from the nation's civil air transport infrastructure. The limited duration of Australia's recent commitments to the Gulf War and Somalia probably did not present problems for planning staffs which were anywhere near comparable. We can well imagine, however, that there must be lessons in what Vietnam entailed of relevance for future operations—including a protracted conflict on the remote northwestern reaches of our own continent.

Having reached Saigon, a newly arrived soldier could usually be expected to be despatched to the main Australian base at Vung Tau, or perhaps direct to the advanced operational base 16 miles inland at Nui Dat. To get there, he may have found himself put aboard either a US transport or one of the regular freight services operated by the RAAF's No 35 Squadron. This unit had originally deployed to Vung Tau in August 1964 as the RAAF Transport Flight Vietnam until redesignated as a normal squadron in June 1966. Equipped with Canadian-manufactured Caribou Mk1s, a type recently introduced into RAAF service, the unit was integrated into the tactical airlift system operated by the USAF and was tasked and broadly controlled as part of that organisation. This meant that it flew mostly scheduled services over a maximum of five routes daily, operating very much as summed up by its nickname of 'Wallaby Airlines'.

One of the routes routinely covered by No 35 Squadron connected Vung Tau with Nui Dat and Saigon, but otherwise the unit's aircraft operated throughout the length and breadth of Vietnam. Their missions were, therefore, more often in support of allies than fellow Australians—a situation which did not entirely please the Task Force commander in 1966, who considered he should have primary call on the Caribous' effort. Commander AFV took some convincing that the proximity of Nui Dat from Vung Tau meant that tying the squadron to 1ATF in this fashion was a wasteful use of tactical air transport. Nonetheless, the task force subsequently retained a notional 'first call' on support from No 35 Squadron although the bulk of the units effort continued as before.

Caribou support for the task force became of crucial importance during the communist Tet offensive of February 1968, when the road link between Vung Tau and Nui Dat was cut. Occasionally the RAAF transports were used in direct tactical roles, as in 1969 when they provided troop airlift during Operation KINGSTON and Operation KINGS CROSS. Normally, though, the absence of prepared airstrips meant that fixed-wing transports were of limited utility for combat purposes. One unusual experiment carried out by 1ATF involving a Caribou was an attempt made in 1967 to burn off the jungle canopy protecting a Viet Cong supply base, using the transport plane to drop drums of petrol which were then ignited from accompanying helicopters using tracer machine-gun fire. The attempt was not particularly successful and was not repeated.

On joining his assigned unit within 1ATF, our new arrival would presumably find himself taking part on patrol duty or other operations. Here he would see the full range of air support on offer to forces on the ground. The principal air vehicle with which he would become familiar was the UH-1 Iroquois helicopter, the omnipresent workhorse of the Vietnam conflict. Accompanying 1ATF on its deployment was No 9 Squadron of the RAAF, with the role of providing direct support to the Army's ground operations in the form of troop transport, logistic resupply and casualty evacuation. Although sharing the US Army airfield at Vung Tau as their permanent base, the Iroquois used Nui Dat's 'Kangaroo Pad' as their forward field on a daily basis.

At first the RAAF squadron had an establishment of only eight helicopters, of which six were normally expected to be available on a daily basis. These were B model Iroquois, capable of carrying a maximum of eight people in its cargo cabin in addition to two pilots on its flight deck. Since it was usual for each aircraft crew to include a loadmaster to control passenger boarding and deplaning, the carrying capacity of all six helicopters was restricted to less than two platoons in a single lift.

Because of the small numbers of aircraft available, therefore, the task force was initially heavily dependent on additional support provided from Assault Helicopter Companies of the US Army. Casevac (or Dust-off as it was known) was one task which was usually handled by the Americans during daylight hours until November 1970, when this became solely a RAAF responsibility. It is worth noting, though, that Australian personnel much preferred to use the helicopters of their own air force. One digger has commented on how off-putting it was to find US Army helicopters being flown by 20-23 year-old warrant officers, often with a co-pilot of the same age:

There was a remarkable difference in flying US air as opposed to RAAF air. The RAAF had officer pilots and the aircraft looked reasonably serviceable. The choppers we clambered into looked tatty and well worn. There were no seats and we sat on the floor of the Iroquois linking our arms together and praying we wouldn't slide out where there was normally a door.²

From 1968, when 9 Squadron's aircraft establishment was increased to 16, the number of helicopters on the flight line daily was doubled. Moreover, the unit was re-equipped with H model Iroquois, which were faster and more powerful machines with a larger cabin able to accommodate a total of 15 people. This meant that, even carrying two pilots and two crewmen to operate sidedoor machineguns for self-protection, each aircraft could take a complete infantry section at a time. On this basis a full company now could be managed in a single lift.

In addition to the sort of tasks originally prompting the despatch of the helicopters to Vietnam, these aircraft proved valuable in a number of other ways. The RAAF machines were used in support of psychological warfare objectives through seeding enemy-dominated areas with propaganda leaflets, and in aerial spraying for both passive and offensive purposes. After the Agent Orange scare, one hesitates to lay too loud a claim to efficiency, in the latter role; it remains the case, nonetheless, that the RAAF Iroquois were periodically employed in the task force's antimalarial program and in controlling vegetation growth at Nui Dat. Defoliation missions were also put to use in attacking crops and food gardens in enemy-held territory. Finally, the aircraft were active in olfactory reconnaissance—that is, using an American device called the 'people sniffer' to detect enemy base camps under the jungle canopy and enable these to be attacked.

If our newly arrived soldier happened to be a member of the Special Air Service squadron which formed part of the task force strength from 1966, he would probably come to an even greater appreciation of the degree of air support provided by the RAAF. The secure insertion of small reconnaissance patrols into enemy territory for extended periods, and moreso their recovery—often in the form of 'hot' extractions carried out under pursuit by the Viet Cong—produced an especially close association between the two services. Both held the other in mutual respect for their skills and courage, in what was in every respect the epitomy of a professional team.

Assisting the task force with the provision of visual reconnaissance, air liaison and aerial command post facilities was the Army's own organic aviation element, No 161 Reconnaissance Flight. Deployed in support of 1RAR in 1965, the unit originally operated Sioux light observation helicopters and Cessna 180 fixed-wing aircraft. In 1969 the Pilatus Porter replaced the Cessna, and in 1971 the Sioux was made redundant by the Bell OH-58 Kiowa. While both fixed and rotary-wing types filled a useful sphere of activity in directing artillery fire, the helicopters sometimes proved invaluable in getting into landing spaces too small for the Iroquois, particularly in evacuating casualties, in which case these aircraft often ferried wounded to larger clearings where they could be transferred to RAAF aircraft.

When elements of the Australian battalions in the field came up against enemy obstacles or opposition, they were able to call in an array of aerial weapons to help in eliminating or suppressing this—bombs, napalm, rockets or cannonfire. Delivery of close air support might come from any one of the several air forces operating in the theatre, from the Vietnamese Air Force, the US Air Force (USAF), US Marine Corps or the US Navy, always under the direction of a Forward Air Controller (FAC) who would mark the target with smoke rockets and direct the strike. For Australians this FAC would normally be from the Tactical Air Control Party at Nui Dat, a detachment of the USAF's 19th Tactical Air Support Squadron allocated to work with 1ATF.

When targets of sufficient size and importance were found within the Australian Tactical Area of Responsibility (TAOR)—that is, Phuoc Tuy province—1ATF could arrange to have an 'Arc Light' strike by USAF B-52 bombers laid on. Pre-arranged missions of this type might even be flown by Canberra bombers of the RAAF No 2 Squadron. This unit arrived in Vietnam in 1967 and was based further north along the coast at Phan Rang, forming part of the USAF's 35th Tactical Fighter Wing. Because No 2 Squadron came under the US 7th Air Force organisation, its aircraft normally received its tasks from within the greater American system and—like No 35 Squadron—might find themselves assigned to missions anywhere throughout the theatre on any given day.

Only a small proportion of Canberra sorties therefore found their way into the Australian TAOR, and this is not surprising on two counts. The first is that, for a troops-in-contact situation, when an appeal for assistance was received it was invariably a case of grabbing the nearest available and suitably armed aircraft. Quite often this might mean diverting aircraft from a pre-arranged mission, or making use of aircraft which—because of weather or the disappearance of the target they were originally launched against—were looking for an alternative target rather than take their weapons-load back to base.

The second factor was that the RAAF bombers were not well suited to the quickly-changing pace of a troops-in-contact situation. The Canberra normally operated alone, and was armed only with bombs—most commonly six 750-pounders—which it dropped on a straight and level bombing run, either singly, in pairs or in a stick. Delivering its bombs one at a time meant flying a wide racetrack circuit with five or six minute intervals between each release. Most commanders on the ground much preferred the sustained pressure which could be kept on the opposition by a pair of F-4 Phantoms using dive-bombing techniques and a variety of munitions. The Canberra was, however, very effective against non-urgent, programmable targets such as jungle base camps, particularly because of the high levels of accuracy achieved by No 2 Squadron crews using this aging aircraft's optical bombsight.

The other main form of assistance available to our soldier on the ground came from helicopter gunships. The use of such aircraft was essential to employing the tactic of assault landings, sending in heavily armed Iroquois to flush out, destroy or suppress any enemy opposition before the arrival of troop-carrying helicopters, and then provide top-cover ready to respond to a challenge which emerged while the landing was in progress. Because the RAAF originally had no aircraft of this type of its own, the task force was entirely dependent on the Americans to give this support whenever needed.

Subsequently, a purely local initiative was taken in No 9 Squadron to improvise the fitting out of several aircraft to meet the Australians' own needs. After trials with a UH-1B during 1968, by April 1969 the task force had available its own fireteam of UH-1H gunships (nicknamed 'Bushrangers') carrying rocket pods and mini-guns, in addition to twin side-door mounted machine-guns. This gave an enlarged degree of flexibility in terms of the offensive fire support which could be brought to bear whenever Australian ground troops encountered opposition. The gunships provided cover not just for assault landings and during the insertion/ extraction of SAS patrols, but were called in to deal with bunker systems and whenever the enemy was found in situations where the infantry could not easily get at him.

Having described the nature and extent of air support to Australia's ground forces in Vietnam, there is of course a lot more to be said about how efficient or effective these arrangements were. On the Air Force side, the main problem was one of preparedness. In the decade or so before the commitment to Vietnam, the RAAF had been generally addressing the possibility of becoming involved in an air conflict in the southeast Asian region—but certainly not of the type, nor in the precise location, in which it found itself. The preparations made by the RAAF for putting aircraft and people on the ground in Vietnam were, therefore, hampered by the fact that the service was caught with little warning, and called on to meet requirements—determined by political considerations—which had little regard to the planning guidance which it had been previously given.

The despatch of the Caribous, for instance, came just as the RAAF was taking this aircraft type into service. In fact, the machines sent to Vietnam in August 1964 were delivered directly there from the manufacturer's plant in Canada, and were only the third and fourth batch, each of three aircraft of the type, which the RAAF had received. The six machines thus diverted represented a third of the new squadron in the course of being created to meet the Australian forces' needs. Small wonder, then, that the crews of the Transport Flight needed time to shake themselves out and learn the best way of operating their unfamiliar aircraft in unanticipated surroundings. Strong criticism can be made of the lack of support which they received from RAAF authorities back in Canberra while they dealt with these difficulties.

Much the same situation of an unforeseen commitment prevailed in the case of the Iroquois. Indeed, the RAAF considered that it had been effectively ambushed by the Army into sending No 9 Squadron to accompany the task force in 1966, with the result that little planning had gone into such a contingency before the service found itself having to deal with it. A complaint on these grounds might find little sympathy among services who pride themselves with thoughtful anticipation of real requirements, and in this case it deserves even less. As early as 1965 the Army had signalled its thoughts on the desirability of helicopter support for 1RAR in Vietnam and received a cold rebuff from the RAAF. The Chief of Air Staff at the time, Air Marshal Murdoch, *may* have been justified in terms of resource allocation for the stance he took, but the terms in which he rejected the Army's suggestion were tactless at best.

Thereafter, Army was ever vigilant for signs of continuing RAAF truculence. The arrival of No 9 Squadron in a state of readiness which was less than battleworthy again seemingly confirmed suspicions that the RAAF would have to be dragged, kicking and screaming, towards meeting Army's legitimate expectations for air support. This was unfair to an extent, since Army elements were themselves not immune to charges of sloppy preparation: the newly arrived 5RAR, for example, had underestimated its ammunition needs and had to be helped out by No 9 Squadron making available its own holdings, and flying these in to Nui Dat the day after the helicopters arrived while the unit was itself still unpacking and settling in.

However justified (even in part) Army's attitude may have been, this also took little account of the fact that the helicopter arm was a relatively new accretion to Air Force capabilities. No 9 Squadron had come into being just five years earlier, primarily as a search and rescue outfit. Although the role of the unit had been amended to reflect the fact that cooperation with Army represented an additional important function, the full import of this change was still being worked through. The value of the helicopter was, after all, not immediately apparent in a service dominated by the view that it was bombers and above all fighters which made an air force. Now, buoyed by the experience of Vietnam, the battlefield potential of these aircraft may be taken for granted, but the reality then was that the RAAF was still very much on the upwards slope of a learning curve.

One consequence of Vietnam was the rapid expansion of the helicopter arm within the air force structure, including the setting up of a large scale training facility for aircrew here in Canberra, at Fairbairn. Until this was producing the necessary numbers of qualified pilots and crewmen, the RAAF was scratching to meet its personnel commitments at No 9 Squadron and gladly made use of Royal Australian Navy and Royal New Zealand Air Force pilots to alleviate the shortage.

The learning curve was a constant factor of the Vietnam experience. The improvisation of Bushranger gunships, for example, meant that the crews operating these aircraft took time to work up their proficiency and to resolve technical and procedural problems. It was during the early period of their operations that an instance occurred where a company of 6RAR was accidentally fired upon, a case in which both parties had failed to observe sensible rules for controlling such operations.

Failures of any sort only compounded a view that the Army could do better if it operated and controlled its own helicopters, as did the US Army. Viewed from outside service loyalties this argument had about as much to commend it as the fighter jocks' view of what constituted a 'real' air force, it being totally irrelevant who operated what in an organisation which was truly dedicated to a joint purpose and ideals. Instead, the issue became the cause for much petty rivalry and jealousy, unfortunately fuelled on the part of Army personnel by unrealistic expectations of the RAAF based on what they observed of the American system. In short, the Army can be accused of allowing itself to be dazzled by the US example of what it took to be a real army, without acknowledging that Australia was a second-rate or at best middle military power which needed to tailor its doctrine to that reality.

Army's attitude was perhaps most pronounced in respect to the helicopters, but it was apparent elsewhere too. The Army's medical authorities attempted to show that they were better fitted to control aeromedical evacuation than the RAAF. Commanders of 1ATF complained, not just in the case of No 35 Squadron but also No 2 Squadron, when it seemed that these RAAF elements were operating not as part of their personal fiefdom, regardless of the fact that the scale and nature of the operations carried out by Australian forces could not properly absorb or fully utilise the capabilities these units could offer. It seems that the argument that Vietnam was 'a ground war' was too often interpreted as simply a plea that everything and everybody should be subordinate to Army's views and wants. This was an altar on which not just established inter-service agreements were sacrificed, but also the principle of inter-service cooperation based on stating a requirement and allowing the relevant expert to determine the best way of meeting it.

So strong was the Army's sense of rectitude that the task force commander initially insisted that No 9 Squadron's helicopters should be based forward at Nui Dat, where SOPs against showing lights at night and making noise within the defence perimeter prevented the carrying out of normal maintenance and repairs. The absurdity of this requirement when the flying time from Vung Tau was only a matter of minutes anyway, and few circumstances could be envisaged where the difference would be crucial, demonstrated not so much—as was often argued—that the RAAF was determined to hang on to its comforts and peacetime practices, but the depth of Army ignorance.

Not wishing to be accused of being one-eyed over where the right lay in the instance of Vietnam, it must be admitted that the RAAF was very much its own worst enemy. Inter-service relationships is an area which comes in for more examination later in this conference, so it is only necessary to point up the service politics being played in Canberra which saw the major general serving as Commander AFV saddled with an RAAF air commodore as his deputy, when really there was no justification for such a position. Equally, the insistence of Department of Air authorities in Canberra at having the officer heading 1ATF'S air component designated Task Force Air Commander was quite needlessly provocative. The first holder of this post, Group Captain Peter Raw, considered that he should be called Task Force Air Support Officer, in clearer recognition of what the position entailed, but his stance of moderation and reason was not shared by his RAAF seniors back in Canberra.

Other instances which can be cited show a poor attitude on the part of individual RAAF personnel. Army veterans of Vietnam who used the Caribou services have complained of being accorded lower priority than RAAF passengers by air movements staff, even when they were travelling on official duty and the RAAF personnel were patently not. Other complaints have been heard regarding a lack of willingness sometimes shown by Iroquois captains to accept the risks entailed in taking out Australian ground wounded, a hesitation supposedly not shared by the crews of US Army helicopters.

Returning to where the Army missed opportunities to get the best out of the air power that was available to it, let me point to complaints made that ground commanders were often too conservative in their use of close air support. Several FACs have commented on the hesitancy shown by 1ATF field officers to employ air strikes in proximity—say, less than 1000 metres—to their own troops or positions, although battlefield statistics were pointing to the fact that this was where the most damage was likely to be inflicted on the enemy. It is impossible not to feel some sympathy with the cautious reluctance shown on this score, when other airmen offer observations about the poor level of accuracy achieved by air power in Vietnam because of the technology available in older aircraft types in use (such as the A-1, A-37, F-100 and F-5) and the poor levels of proficiency shown by many newly arrived USAF pilots.

Nonetheless, prescribed safety distances for using explosive ordnance near protected troops (theoretically dug in, but more realistically simply lying down and wearing steel helmets) were as low as 100-200 metres, and only 25 metres for strafe and rockets fired individually. These margins, of course, already contained a factor to guard against error, so that unwillingness to employ to the full the resource represented by air-delivered weapons meant a considerable degradation of the benefits of having that air power.

Operations by 1ATF were also constrained by other practices which experienced airmen considered 'weird'. Requiring FACs to steer clear of the location of Australian battalions, because of fears that the mere appearance of the aircraft might compromise the security of friendly positions, meant that—in effect—FACs were excluded from areas of likely activity, precisely where they could be of most value. Through being forced to stay away, the skilled eye of these aerial observers were prevented from gaining valuable intelligence of enemy activities and presence.

In summary, therefore, the experience of Vietnam offers an interesting example of where land/air operations were something less than a brilliant success story, even with everything apparently working in their favour. It is most instructive that the worst failings were human and attitudinal ones, rather than limitations of weapons systems. The greatest improvement which

could have been made in that theatre was undoubtedly in the area of interservice relations. It would be a mistake to overplay this factor. Members of the RAAF and Army were not constantly at each other's throats, and even the period of worst difficulty accompanying the establishment of the task force was fairly quickly sorted out. But there can be no denying that a broad spirit of goodwill and mutual support was lacking between the two services, and this has given rise to some unfortunate folklore about the conduct of the war.

The real risk, though, may be in attempting to draw lessons from what was in most regards a unique operational situation in Vietnam. Rarely again, perhaps, will ground commanders be free to operate in such a permissive air environment—especially now, when even relatively unsophisticated armies can be expected to have shoulder-fired anti-aircraft missiles. Vietnam provides some useful illustrations of where the conduct of land/air operations could be improved, provided we do not continue to emphasise the wrong or irrelevant aspects.

Endnotes

1. The views expressed and issues raised in this paper are elaborated in my volume of the official history of Australia's involvement in southeast Asian conflicts 1948-1975, entitled *The RAAF in Vietnam*, Sydney, 1995.
2. Gary McKay, *In Good Company: One Man's War in Vietnam*, Sydney, 1987, pp 76-77.