

SIR GEOFFREY ROBERTS MEMORIAL LECTURE, 2011

The Future New Zealand Military and Civil Aviation Partnership

Thanks and acknowledgements, including:

- *GAPAN Chairman Bryan Wyness for the invitation to speak.*

On behalf of the Chief of Air Force, AVM Pete Stockwell (who is swanning off overseas), it's my great pleasure today to provide the second Sir Geoffrey Roberts Memorial lecture. Before I begin, I would like to acknowledge again the great job that Ron Tannock did in providing the very first of these lectures last year – on the topic of Sir Geoffrey himself. As you know, Sir Geoffrey's own story is one that traverses and entwines both military and civil aviation in New Zealand, and in this way he very fittingly symbolises the theme of my talk today, which is the future New Zealand military and civil aviation partnership.

The RNZAF

Let me begin by stating quite clearly at the outset that New Zealand's air force exists for a single purpose – it is a purpose to which all of our other considerations are subordinate. That single purpose is to conduct military air operations to advance New Zealand's security interests. We are carrying out these air operations every day, in places such as Afghanistan, East Timor, the South Pacific and Southern Oceans. And of course very recently also in our own country – in Christchurch.

The new Chief of Air Force's priority, first and foremost, is to ensure that we are able to continue these operations safely and effectively into the future. Supporting this are other priorities that include standing up our new capabilities, driving through important reforms and efficiencies, and developing the skills and potential of our people.

While our primary purpose might be different to yours in civil and commercial aviation, perhaps some of these priorities might not sound too different to yours. And if that's the case, then perhaps that shouldn't surprise us too much. After all, it would not be the first time in history that our interests have overlapped.

Partnership in History

Next year, the RNZAF celebrates its 75th Anniversary. With our focus often fixed upon our own daily operations, it can be easy to forget that for large parts of our history, aspects of military and civil aviation have mutually supported each other in this country. Indeed this civil/military development has been inextricably linked with the development of New Zealand itself.

Just one example would suffice. It was on the 5th of September 1948 that base personnel at Ohakea assembled and looked on with great curiosity as an RNZAF Grumman Avenger made several low passes and dropped a ton of superphosphate across the airfield. It was the first air force top dressing trial in support of a Government sponsored initiative - a piece of iconic New Zealand nation building that,

as we know, soon became international. The idea came from a farmer from Hunterville, was supported by the Government of the day, was trialed by the air force, and was developed commercially.

We could run through any number of examples over the past 75 years, from training to air transport, from NAC to Safe Air, and from DH89s to Bristol Freighters, flying boats and Dakotas – there are many stories that weave between civil and military aviation – and many of which feature the recurring name of Sir Geoffrey Roberts.

Technology

But I think it would be fair to say that as both civil and military aviation have developed into mature sectors and organisations over the years, and as New Zealand itself has developed as a country, we have not needed this mutual support to the same degree as we used to, and so we in large part have gone our different ways, doing our different jobs.

But nothing is ever static, and certainly not technology or aviation. Right now the RNZAF is in the middle of a multi-fleet technology and equipment upgrade, the likes of which we have not seen since the 1960s. This includes: two B757 aircraft, recently converted in Alabama into a high utility combi configuration; the life extension and flight deck upgrade of our C-130 fleet; the upgrade of the Orion fleet's surveillance sensors, mission systems and flight deck systems; the purchase of eight new NH-90 helicopters to replace the Iroquois fleet; and the purchase of five new A109 helicopters to replace the Sioux. And in addition to all of this, we are in the process of working through a replacement pilot training capability.

Along with these new and upgraded aircraft, we are also taking delivery of important support and training systems – for example flight training devices for the C-130, P-3 and A109, and a crew trainer for the Orion's mission crew.

What all of this means is that the RNZAF has well and truly arrived in the digital age. Now I think I can see some of my commercial and GA colleagues here saying "about time". And you might have a point; the mainstays of our fleet – the Orions, the Hercules, the Hueys, the Sioux – all joined us in the mid 1960s, and it's often the Kiwi way to extract every last drop of use out of an asset.

But my point is that in many ways the RNZAF is catching up with a number of technology shifts, which have already been steadily underway within our civilian aviation sector over the past few decades. And these technology shifts, and the support frameworks required behind them, start to bring us into closer alignment in a number of areas, or at the very least make us more relevant to each other.

It's true that some of our technology is military in nature – for example electronic warfare and self protection systems – but most technology trends are not affecting us in isolation. The sort of technology I'm thinking of includes: composite structures, automated and networked communication and information systems, fly-by-wire piloting, self-contained navigation, glass cockpits, flight simulation systems, flight tracking and data recording.

And it is not only modernity that makes this technology relevant. In the avionics world we are making greater use of commercial-off-the-shelf equipment to avoid becoming trapped by rapid obsolescence and to provide us with cheaper and simpler upgrade paths. Again, what this means is that we are becoming more relevant to each other, and it raises some opportunities or at least synergies that might not have been there before.

Commercial Partners

But let me step back slightly here before we explore this further. I do not want to suggest that the civil and military worlds currently live in isolation. The Air Force has already been turning increasingly to industry partners because of the ongoing convergence of common issues, and of relevant knowledge and experience. Even a cursory review of some of our current partnerships indicates the key roles they play in sustaining our operations.

Any review would start with Air NZ by way of Safe Air, which is the strategic partner that gives us the depth of New Zealand based logistic and maintenance support that we need. But many on the list are just as vital: Aeromotive and NMIT are key elements in our airborne and ground training; Airways Corp, Radiola and Auckland Airport support our base operations; and of course without Air BP we wouldn't be going anywhere. Our partnership with Beca Applied Technologies will be a key part of future Orion missions, and also at Whenuapai we have Fly My Sky supporting our parachute training.

Some of our relationships are multi-faceted: Air New Zealand have supported us on occasion with our deployments to the Middle East, and we in turn have been able to support them with rapid movement of out-sized aircraft components, and recently we were pleased to be able to support their initiative to fly Erebus families to Antarctica. We also share information and expertise in a range of areas to our mutual benefit, including flight safety.

I could go on, and no doubt will risk offending someone for omitting them from the list. I have not even mentioned our partners in infrastructure, catering and security for example.

The need to look for shared experience and knowledge has also driven us to form closer associations with organisations such as the Aviation Industry Association, the New Zealand Airports Association, and GAPAN. And these associations with industry partners in turn have led us to more closely examine national standardisation of qualifications and equivalency in conjunction with ATTO.

Strategic and Economic Direction

So there is of course ongoing dialogue and support between the military and civilian sectors, but I believe that this trend, which has been developing gradually to date, will now take on a larger shift because of the new realities of our strategic and economic environment.

Even before the Government's White Paper on Defence was released last year, the nature of the global security environment had shifted markedly. In the wake of 9/11,

security has become much more of a national issue than strictly a defence force issue. The need for defence forces to collaborate closely with border control and law enforcement agencies, as well as communities and development organisations has driven a far more collaborative mindset. What the White Paper did was to look at New Zealand's own needs over the next few decades, and to place this within a realistic economic context.

Reading through the White Paper can in some ways be anti-climactic, and in other ways reassuring. This is because it in large part validates the mix of capabilities we currently have, concluding that they offer good utility for the range of challenges New Zealand is likely to face in the future. The Paper has a strong regional focus, and importantly it sets out a case for replacing our major capabilities – the P-3 and C-130 for example – down track, while strengthening some of our other capabilities.

To my mind, the significance of this White Paper is not so much in any shift in military capabilities, but in the fiscal and economic framework that envelops it. The cost of military hardware continues to escalate, and the impact of the global recession on New Zealand is the key issue. And since this paper has been released, we of course have the additional challenge of rebuilding Christchurch. So the importance of this paper, and the key issue ahead of the RNZAF and NZDF, is affordability – to do in the future what we do now, but with little or no additional money.

To achieve this goal, the RNZAF must live within its means. And with new capabilities entering service, the NZDF as a whole must find between \$350 - \$400 million dollars in savings to pay for them, out of a budget of some \$2.2 billion. With this kind of target, there is simply no option to do business the way we always have, or to operate in isolation from the commercial world simply out of preference.

So not surprisingly, we have a large portfolio of reform, restructure and efficiencies to implement. This includes not just cuts and structural changes, but also development of a broader shared services model, centralised logistics, rationalisation of infrastructure – for example further consolidation into the Manawatu, greater use of civilian employees, and more commercial partnering. There is also a strong emphasis on making smarter use of simulation where we can, to reduce future operating costs and to improve the quality of our training.

Importantly, this is not just a slash and burn exercise. The emphasis is on future sustainability and the long term view. This is about smarter partnering and strategic relationships with industry. We want to make changes that secure a strong national support base for our future operations.

Advantages of Scale

So far I have discussed two factors that will bring the civil and military aviation sectors closer together in New Zealand: that is, the introduction of new technologies, and also the fiscal drive for reform and commercial partnerships. But there is a third influence too, which I would like to briefly mention, and that is the advantage of combined scale.

In our globalised economy – and this is of particular relevance to New Zealand – the advantages of scale, footprint and voice have become impossible to ignore. This is true in aviation, with commercial pressures on airlines internationally to merge or cooperate, as it is for primary produce, where super-sized cooperatives such as Fonterra allow New Zealand to have an international presence. And these advantages of scale and cooperation in turn encourage a cooperative approach to public/private business, including public-private partnerships and smarter approaches to leveraging combined national skills, knowledge and infrastructure.

Because aviation is inherently technological and modern aircraft are increasingly complex – in information technology, composites, automation and miniaturisation - New Zealand can benefit nationally from operating it and supporting it if the scale of operation is large enough.

A Model for Partnership

And so we have three significant influences pushing us closer towards each other: technology, fiscal necessity, and global economics. How should we respond to these drivers and what sort of model might we envisage?

Aviation is a distinct specialisation, and this is what air forces and civil aviation have in common, and this is what we have to foster. At the base of any model is the need to mutually support this specialisation.

RNZAF bases of the future will be run on a commercially partnered shared services construct with less uniformed day-to-day management. Infrastructure is a capital intensive resource that can be shared commercially for mutual benefit. I note that some of our facilities in Woodbourne are already used in this way, and the RNZAF's hypobaric chamber at Hobsonville already benefits from shared commercial use.

In logistics and maintenance, the RNZAF will be seeking deeper and more strategic partnerships in the future, including greater use of strategic sourcing. We will need reliable partnerships with a commercial support base that allows us to focus more on operations and deployments. The NZDF's logistics partnership with Lockheed Martin is an example of this future direction.

In training, I see the need for greater shared use of simulation and training, with potential for partnering in both shared assets and instructors in some cases. The goal should be to minimise any respective slack capacity. I must emphasise here that training standards are of the utmost importance to the RNZAF – the skills base that we require to repair airframe damage rapidly in the field, for example, is vital, as are unique military skills such as armament. Partnerships in this area must meet both civil and military needs and not offer a product trained purely for civil aviation.

In our fleets and operations, achieving commonality and partnership is more difficult, with opportunities usually coinciding with large decisions around capital procurement. Nevertheless, synergies are possible, especially in the realm of air transport.

Most importantly, a future model for partnership will involve our people. If we are to succeed as a nation we must make smarter use of this remarkable resource that we have. Traditionally, the RNZAF has provided excellent training for our people, but we

are not always able to retain this expertise in house. On the other hand, the potential of this skilled resource is not always exploited fully in the civilian sector. Some airlines have in their employ a large pool of the country's most qualified and experienced flying instructors trained by the RNZAF. Equally, the civilian sector has more expertise and experience in the use and maintenance of modern technologies that could assist the RNZAF as we modernise. How might this national talent pool be better exploited to the benefit of New Zealand?

A mature and well functioning model would make better and more flexible use of people on both sides of the civil/military divide, using mechanisms such as the active reserve if necessary. Some obvious areas for accessing a deeper common pool of knowledge and expertise are in the areas of COTS technology, air and ground training, software, deeper maintenance, and airport management.

Challenges

None of this is to say that this kind of model is easy to implement in practice. I will be the first to acknowledge that a number of you will have endured frustrations in dealing with Government entities, including ourselves, in trying to realise commercial opportunities and partnerships. Government agencies are not known for their bureaucratic agility – we have rigid procurement rules and processes that we must adhere to, and well defined decision rights at different levels up to Cabinet. Capital asset management is also carefully regulated. Few options exist to simply partner or select a commercial provider without following a full and open, and often long-winded, tender process.

A key factor here is New Zealand's ongoing commitment to its free trade relationships with other countries. Although there are some exceptions, the clear expectation is that tenders will be open equally to New Zealand companies as well as to our free trade partners. We do not have an option simply to buy or partner New Zealand. We often talk about NZ Inc solutions, but there is no simple mechanism that enables this in practice. This is in stark contrast to our civil/military partnerships of sixty years ago, which were part of a deliberate strategy to develop our national aviation capabilities. Is there scope for commercial entities to exert more pressure on Government to examine this area for NZ's national benefit?

Regardless, I don't believe it's a lost cause. I have already mentioned some of our successful partnerships, and successive Governments have shown a willingness to streamline processes when the magnitude of the opportunity is large enough – Warner Brothers comes to mind as one example. The task is to begin with identifying the size of the opportunity and to proceed with persistence and patience.

It is my opinion that we will improve at strategic partnering with time, simply because of the benefits. It will be important, however, to ensure we can build greater transparency between us. For example, it will benefit the RNZAF to develop longer term support contracts with local industry players, but we will not be able to do this with a closed-book "trust me" approach to financials, skills and qualifications, and neither party can afford to be a captured customer in a bad deal. Transparency and open books are the keys.

One factor that could potentially limit the extent of future civil/military partnerships is our separate civil and military airworthiness regimes. Mutually beneficial opportunities could arise in the future from the shared use of aircraft fleets, or from more flexible fleet operating or support options. Current rules surrounding use of aircraft on the civil and military registers do not make this easy. I foresee a need in the future for us to explore options for a more cooperative model that could benefit all parties. Again, we have examples from our history to draw upon. Of course that does not mean that we will always operate the same way to the same standards. The RNZAF's military focus will continue to require us to exercise flexible judgement around some of the rules that our civilian counterparts must adhere to more strictly.

Conclusion

So while there will be challenges in realising a closer civil/military relationship in the future, these challenges should not prevent us from sharing such a vision and setting a course towards it – and I'd like to acknowledge at this point that this vision for a closer partnership is one that CAF's predecessor, Graham Lintott, also passionately held and promoted.

The original architect of the RNZAF, the Honorable Ralph Cochrane, made the point in 1936 that a New Zealand air force would provide the best value for money to the country by doing the most it could with the small number of aircraft it would be able to afford: this means supporting Land, Sea and Government, provide utility and flexibility everywhere the country needs it. Cochrane wrote this as New Zealand was emerging from the Great Depression and value for money was vital. Today, it is still vital.

The future RNZAF fleet is a high tech one, and it is my belief that the Air Force will continue to offer benefits to New Zealand not just in terms of our mission, but also in terms of standards, skills, leadership, and training. And in the areas of technology and economic scales of operation, the civil and military aviation communities will have a lot to offer each other.

To conclude, I offer that the future could benefit from a rearward look at the past. Just as at various times in our history New Zealand military and civil aviators have assisted each other to the overall benefit of the country, so too does the future have this potential. In this respect, as the RNZAF looks ahead next year to its 75th Anniversary, the example of Sir Geoffrey Roberts looks as relevant as ever.