# PAPER 4 DEFENCE STRUCTURAL CHANGES AND THE RAAF

Defence Department structural changes started with the implementation of the Tange Report in 1974, which Dr T.B. Miller saw as 'a giant step along the road to Public Service (as opposed to Parliamentary) control of the armed forces', and continued with the Defence Efficiency Review (DER) and Defence Reform Programme (DRP).

One major and lasting concern about these changes relates to the absence of any debate about the impact of the Tange or DER/DRP 'reforms' on Australia's defence capabilities, particularly in regard to the RAAF which is the most highly technological of the three Services. One would imagine that the imposition of such dramatic changes as those imposed by the DER/DRP would have given rise to much serious and continuing discussion within the defence community. However, a review of the Australian Defence Force Journal over a two year period when the DRP was in full flight shows that, strangely, not one article had been published from any of the Services on any aspect of the DER or DRP. This aversion to discussion and debate has continued to characterise the Defence bureaucracy since then. As a result, one may well question whether Defence has been and is being driven in the right direction.

# The RAAF Engineer Branch, pre-DER/DRP

Traditionally, the RAAF's Technical Services workforce was managed as a central resource, capable of being moved into new projects, to Units, or into support areas in response to changes in Air Staff plans, programmes and priorities. The RAAF's technical support organization was headed by a senior engineer at Air Board level, supported by a staff divided broadly along engineering and maintenance lines. The Engineer Branch provided direct input into Air Staff Targets, Requirements, Plans and Programmes, particularly in the specification of technical requirements, the evaluation of contending systems, the support of new systems, and the resolution of the many technical problems that arose before, during and after acquisition. A Director General of Engineering managed specialist engineering aspects, while a Director General Technical Plans (DGTP) was the focal point for translating all Air Staff requirements into interlocking and integrated technical policies, plans, programmes and priorities in terms of such resources as manpower, skills, facilities, in-service and contractor support, spares support requirements, and so on. This was done in a tightly controlled and coordinated manner and thus provided highly responsive and effective support over lengthy periods of high operational tasking and rapid technological change. As a result, the RAAF had earned an enviable reputation for its size in terms of its operational capabilities and support effectiveness.

The organisation, management systems, and procedures adopted by the Engineer Branch were developed over time in response to continual changes in operational requirements and technology, and from experience. The dismantling of the Engineer Branch following the Sanderson Report deskilled the RAAF to an alarming degree, and made it incapable of contributing effectively to RAAF and Defence plans and programmes. This has been demonstrated clearly by the shallowness and lack of technical content and rigour inherent in the evidence given by Defence and the RAAF before the Foreign Affairs, Defence and Trade Joint Standing Committee's Inquiry into Australian Defence Force Regional Air Superiority. Similarly, the decisions to lock the RAAF into the JSF and to retire the FIII early may well have been quite different had the Chief of Air Force had an Engineer Branch to advise him.

# RAAF Headquarters Support Command

Within the RAAF's Headquarters Support Command, technical support was also organized along engineering and maintenance lines. Engineering essentially established and managed the technical requirements governing airworthiness in terms of what work was required, when, by whom and in accordance with what standards. Engineering also monitored system and equipment performance for reliability, analysed defects and failures and developed Instructions and Modifications. Maintenance, on the other hand, was concerned primarily with the functions of Technical Spares Assessing, and deeper-level Repair and Overhaul.

Assessing spares requirements also involved establishing and maintaining the technical data elements on the RAAF Inventory that identified what parts were needed for what purpose, and provided the basis for resupply calculations. Assessors also controlled parts entering the RAAF Inventory to ensure that they met engineering (airworthiness) and maintenance requirements, and avoided inventory proliferation. While the assessing function was sensitive to the criticism that it consumed too much technical NCO effort, the function was, and remains, critical to the effective and timely introduction of new systems and equipment, and to the safe operation and day-to-day support of existing systems and equipment. While software tools assisted with this function, it needed to be anticipatory, so its success depended always upon sound technical expertise. The many facets of the assessing function required members to undergo considerable initial and follow-on training. The assessing function was thus pivotal to engineering, maintenance and supply effectiveness. The decentralisation of this function impacted immediately and adversely the support effectiveness at RAAF units.

The Repair and Overhaul function managed all deeper level maintenance conducted both in Australia and overseas. Maintenance programmes were compiled across weapons systems, and by like equipment, so as to provide an economically and technically viable work package for local industry, without the need for subsidization. This approach established a number of local contractors that not only had the ability to do the required overhauls but were capable of providing some deeper level of support in conducting defect investigations and developing local modifications. The centralized management of repairable items ensured that:

- Units had the range and quantity they needed to support their planned operations.
- Repair programmes supported operational plans, higher level maintenance programmes, and engineering requirements.
- Local industry was supported and developed.
- Financial and other resources could be diverted promptly in response to changes in operational requirements and priorities.

In essence, the repair and overhaul function was characterized by a high degree of efficiency, effectiveness, responsiveness, economy and flexibility while supporting and making best use of local industry. The system was invariably the envy of USAF officers on exchange. The decentralisation of this function could not mirror remotely the characteristics of the centralized organization, and RAAF capabilities suffered immediately.

The point to be made here is that all the training and management overheads involved with the provision of this wide range of

engineering and maintenance support were focussed at Support Command, and lessons learnt were applied across all RAAF force elements to meet their individual requirements.

The Senior Maintenance Staff Officer within Support Command also had two other areas of activity, those of overseeing the maintenance support effectiveness of units within Support Command and the support of new projects. The former provided for visits to units by a small team of engineers to check on unit maintenance effectiveness, provide assistance and advice, and resolve any issues within the Command on behalf of the unit. In this way, problems were identified early and corrected before they impacted operational capabilities or safety. The latter provided assessing and repair and overhaul effort in support of project teams working within Australia and overseas. New equipment was thus integrated into the RAAF Inventory as requirements were identified, and this enabled maintenance support capabilities to be in place by the time the new system was introduced.

## At RAAF Units

Pre-DER/DRP and before the formation of Weapon System Logistic Management Squadrons, RAAF Units were organized and manned primarily so as to focus wholly on the support of operations. There were few distractions to deflect them from this objective. There may have been some frustrations at times with higher management in getting the timely response they felt they needed to resolve their problems, but basically their Command provided sound support and guidance, in depth, drawing resources and experience from across the Service and Industry, and from overseas Services and Industry. Certainly, there were changes that could improve support to Unit managers, but the policy was clearly that Unit maintenance should be focussed on operations and not be subject to distractions

## Support Command Reorganisation and the DRP

Most of the stresses and strains that were being encountered by the RAAF, and the other Services following the Tange reorganisation of the Defence Departments, were due more to a prolonged shortage of financial resources rather than any inherent, major structural problems. The Department of Defence was just incapable of obtaining funds sufficient to maintain even a minimum of operational capability in any of the services. In response to these stresses and strains, Support Command embarked upon a major reorganisation which was based on support by weapon system, decentralised down to appropriate bases.

The decentralised Weapon System Logistics Support Squadrons (WSLMs) were to be guided and managed at higher level by a Logistics Support Command and the Engineer Branch within Air Force Office. However, each force element had now to carry a whole range of very complex and resource and skill demanding overheads that had been previously carried centrally. For example, each had to manage airworthiness, maintenance policy, maintenance planning and organization, supply support and inventory management, documentation management, repair and maintenance within industry, spares assessing, new project support, and manpower and training. The effort associated with these management and administration overheads was heavy and continuous and required experienced and capable manpower with very specific skills to be available at each WSLM. Any shortcoming in any of these areas would impact directly upon operational capabilities and airworthiness. Trying to carry all these overheads at the best of times would be a major task, but under resource constraints, whether finance, manning or experience, the task became virtually impossible and demoralizing. Furthermore, these overheads must certainly compete for Unit management's attention with the primary task of providing operational support

In short, it is felt that under continually evolving organisational trends, the overheads involved are too heavy for the force elements to carry and that operational support must suffer. Furthermore, there can hardly be any net economic or efficiency gains through this multiplication of overheads. There needs to be a far better balance between those overheads that should to be carried by the force elements and those that are common to all elements and are better carried centrally, as they were quite successfully in the pre-DRP organisation.

Had the RAAF maintained its Logistics Command and Engineer Branch, an organisation may well have evolved which made best use of available resources, but both of these organisations were to be lost under the pressure of the Commercial Support Programme (CSP) and the Defence Reform Programme (DRP). The resulting widespread deskilling of the RAAF sowed the seeds for many of the difficulties Defence has been facing from that time, especially in managing high technology programmes.

The Commercial Support Programme

The Commercial Support Programme (CSP) sprang from the Wrigley Review 'The Defence Force and the Community', June 1990. Like many Defence reviews, the author did not have any real knowledge of the subject or bother to consult with the Services, but simply gave his instincts free rein. The results promised to be miraculous. There would be dramatic manpower and cost savings and the efficiency and effectiveness of the defence forces would be increased many fold. Needless to say the results fell far short of the promises. Wrigley's Review is well worth reading in retrospect as an excellent lesson in the dangers of accepting a review done in isolation by someone who has little knowledge of the subject.

Following the extension of the Commercial Support Programme (CSP) through the RAAF's depot level facilities, and then through the intermediate levels of RAAF maintenance, the RAAF's technical workforce was reduced to a solely operating level support role. It is rather sad to see the remarkable range and depth of technological skills and expertise that once existed reduced to what is really a fuelling, arming, servicing and 'black box' changing capability. These changes, which contributed to the inevitable, dramatic deskilling of the RAAF's technical support force, flew directly in the face of hard won experience over many decades.

The subject of the CSP in principle and practice is a wide ranging one of critical importance to the RAAF in particular and to defence preparedness generally, but one beyond the scope of this paper. Those who have been involved with contractor support will appreciate that it is a twin edged sword that must be handled appropriately. The continual surge towards contractor support on the basis of perceived economy is to be viewed with much suspicion, for the general principle still holds: that contractor support is principally a trade off between perceived cost savings and support responsiveness and flexibility. Perceived cost savings because, at least initially, service trained technicians and managers are seen as being readily available from disbanded Units. However, as the source of these people diminishes, contractors will have to increase wages to compete for dwindling resources, or add training costs to their bids, and this is exactly what is happening now. Either way, maintenance costs will go up. Perceived economies also, because the lower reliability of the equipment so often supplied by the lowest tenderer will in turn impact upon weapon system reliability and incur increased maintenance effort and costs at every level.

Impacts of Structural and Organisational Change

It is difficult to see how the changes that have been sweeping through the RAAF will provide anything like the robust, flexible and responsive technical support that the RAAF had been able to rely upon in the past, and in turn the same operational effectiveness of the past. The impetus for the revolutionary changes introduced by the DER/DRP was a voiced lack of financial resources needed to fund future capital equipment acquisitions. As a result, operating costs had to be cut. Unfortunately, all decisions taken subsequently have been based solely perceived economies, not upon those characteristics upon of responsiveness, flexibility and depth of expertise upon which RAAF operations have relied so much in the past and must continue to in the future. We now have the old catch cry 'money must be saved at any cost' on the grandest of scales. Essentially, all mistakes that arise as a result of this approach must be sheeted home to a Government that has lost control of Defence since the Tange review.

While many factors go to make up the strength and capabilities of our defence force, the Defence Budget is the critical one. The level of the Defence Budget reflects generally the demands of the current defence force and the commitments to future defence capability programmes, but the Budget is also impacted directly by the state of the national economy, the philosophy of the Government, the competing demands of other Government sectors and the continuing assessment of those external factors influencing our defence preparedness. Despite periodic Government protestations that defence outlays have been maintained, the level of allocation is still about the lowest since 1939 in terms of GDP and compares unfavourably with our neighbours where outlays, technologies and capabilities are increasing. Our technological and force capabilities edge, built up as a result of much effort over the years, seems to be perilously close to being soon overtaken, and once lost it will be extremely difficult and expensive to regain. It is no use deciding to pay insurance premiums for Australia's defence only when the country is faced with a serious threat. Defence capabilities take time to develop and can not respond to stop/start policies!

The Department of Defence in one of its Budget Inquiry Submission called for an end to Defence spending being based on a percentage of GDP and for outlays to be based upon strategic considerations. Whatever method is adopted finally, there needs to be a better way of funding what is, in effect, Government's most important responsibility to the people of Australia – the security of the Nation.

## Summary

Since the implementation of the Tange Review, the RAAF has been buffeted by constantly by structural changes. As the most highly technological of the three Services, the RAAF had developed, through experience, an organisation characterised by a strong technological backbone. This in turn provided a strong focus and unity of direction that stretched from the specification and introduction new weapon systems and their support requirements to the provision of engineering and maintenance support throughout their service life. The Tange Review, the CSP, and the DER/DRP stripped out this backbone and replaced it with a massive, confused bureaucracy with the result that the RAAF is now virtually technologically de-skilled and incoherent.

After 32 years, the results of these structural changes have not provided the economies or efficiencies promised, quite the opposite. If Australia is to recover only part of what has been lost, then the RAAF must have its technological backbone replaced.

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