

PAPER 6 - THE NEED FOR AN ENGINEER CHIEF IN THE RAAF

A SHORT PAPER

Since the 1980s, the RAAF Engineer function, which had served the RAAF so well both in war and in peace, in times of resource stringency, and during great expansion and modernisation, with all the attendant challenges, has undergone a traumatic number of changes. This brief review of the role of engineering in the RAAF was prompted initially by the Defence review of Support Command Australia, which, as a result, became part of the Defence Materiel Office (DMO). DMO then assumed responsibility for through-service support of all defence systems and equipment, giving further reasons for disquiet.

To a great extent, the development of an engineering branch within the RAAF followed the experiences of the RAF, not surprisingly, as the challenges of the two services were, and remain, much the same. The RAF's move towards an engineering branch, which the RAAF later followed, was prompted by the report of a high-level committee under the Chairmanship of Air Marshal Sir Roderick Hill. His underlying rationale for the formation of the Branch included:

"In our view, air operations will always depend for their success to a marked extent on the right handling of the related technical problems. Intelligent direction of scientific and engineering resources, as well as of the men who apply them, is therefore fundamental. The evolution of a common technical doctrine and a strong corporate feeling is prerequisite to really efficient and economic management.

The RAF is steadily becoming more dependent for its offensive power on technical imagination, skill and accomplishment, while technical equipment is increasing in variety of use and scope of function. In these circumstances, leadership and the creation of a powerful unifying influence is of primary importance, without it technical endeavour may well tend to be sectional and separatist. Nevertheless, while firmly harnessed to operational requirements, the vigour of

technical initiative has by all possible means to be sustained. It is here that the balancing effect of professional judgement is indispensable."

Interestingly, the strongest support came from the senior members of the General Duties Branch of the RAF and, in essence, the decision spelt finally the end of a generalist approach to what was and remains a specialist function.

The RAAF, however, decided to abandon its Engineer Branch late in 1989. The reasons behind this move were, principally:

- *An arbitrary reduction imposed by the DRP in the number of senior posts in the three Services, irrespective of the inherent differences in technological complexity and technological dependency between the Services, resulting in the loss of the Engineering and Development Chiefs and their Branches. The Supply Chief position had been down graded some time before.*
- *A move within the RAAF to introduce a General List at senior officer level (above Wing Commander), seemingly with little regard for the lessons of the past, and seemingly with little, if any, appreciation of the role and importance of specialist engineering input to the planning and execution of air operations at the highest level.*

Following the loss of the Engineering Chief, a reduced engineering function moved to the Materiel Division, was then transferred to come under the Deputy Chief of Air Force, and now resides in very token form within the Defence Materiel Office under a Director General of Technical Airworthiness.

These moves tend to indicate that the role and functions of engineering and maintenance have not been kept in clear focus and have probably been blurred by the tendency to concentrate on 'Logistics' to the detriment of those clear, concise and coherent engineering and maintenance functions that must take place and be managed properly if operational ends are to be achieved safely and logistic support is to mean anything. Problems such as the Westralia and Sea King disasters are indicative of deficiencies in the management of technical functions (principally configuration control which is critical to airworthiness) within a high technology service.

The emphasis placed on airworthiness following the loss of the RAAF's Engineer Branch, although possibly contributing to some wider understanding of the nature of airworthiness standards, may also have diverted attention from the many detailed technical (engineering and maintenance) activities that go to make up aircraft availability, reliability, and airworthiness. Airworthiness is really the end result of conducting engineering and maintenance support under strict disciplines. If any one of the elements of airworthiness is deficient or missing, then the risk of accident is high.

With the review of Support Command Australia, an opportunity arose for the RAAF's engineering function to be revisited with the aim of:

- Refocussing on those engineering and maintenance functions required to support Air Force plans and programmes so as to provide a balancing higher level of engineering management of the technical functions and resources allocated to the various Force Element Groups.
- Re-establishing the engineering function within the Chief of Air Force (CAF) organisation to ensure that all Air Force operational plans and programmes reflect all technical implications, and to ensure that the CAF can be guaranteed the required technical and airworthiness standards, where applicable, for all Air Force technical equipment, both in-service and planned

However, instead of solving problems already becoming acute, Defence decided to form a Defence Material Office (DMO) to take over responsibility for new projects, as well as in-service support, thus building in even greater organisational, functional, and financial barriers between those being supported and those charged with supporting.

If Defence is to regain the technological expertise it so sorely needs, the RAAF must be re-skilled. However, only a Chief Engineer can provide the leadership, develop and maintain the morale, and provide the unity of direction that will avoid the risk of technical endeavour becoming sectional and separatist, as feared by Air Marshal Hill. Only a Chief Engineer can guarantee to the Chief of Air Force the engineering and maintenance standards required for all RAAF technical equipment.

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