

### **Submission to the Senate enquiry on the capability of Defence's engineering (PSE) workforce**

My name is Peter Hunter and I have been employed in the Defence Science and Technology Group (DSTG) for sixteen years. My work encompasses duties as a physicist, however I have a technical background and it is with this perspective that I make this submission.

Initially I trained as a radio tradesman with Bureau of meteorology in the early 1970s where I worked for a number of years before moving to industry and Adelaide University in a technical capacity as a maintenance technician. During this time I completed a part time Physics degree and am currently enrolled in a part time Master of Philosophy program.

Currently my work duties encompass work in a team to plan and execute equipment trials in support of development of defence capability. My duties include all aspects of logistics and safety planning and implementation to allow the conduct of the trial in a safe and timely manner. My duties also include support to and active participation in the research program of the Environmental Luminescence group in the School of Physics at the University of Adelaide

I make this submission from the perspective of technical and trade employees of the DSTG, noting that these observations and opinions whilst generally held are my personal views.

Currently the trade and technical effort in DSTG has become critical due to a number of factors. Firstly there has been erosion of absolute numbers due to recruitment freezes and staffing ceilings coupled with the loss in highly experienced individuals who are reaching retirement age and taking packages at short notice. The shortages are exacerbated by the propensity of management to somewhat tailor larger activity programs to lower cost options. Generally, this tends to exclude or lower the priority of hardware based projects due to their higher implementation and running costs and reduce the need for technical and trade employees who are more likely to be employed in these projects.

Secondly, due to a lack of effective succession planning, the knowledge of the remaining technical and trade employees which is gained over extensive periods of time (20, 30 or more years) is not effectively passed on to new recruits. Additionally, with the downsizing of the centralised engineering workshop facilities (continuing to this day) the synergies available to staff, including mentoring, in the larger facility are missing. The farming out of many activities to the wider DSTG community means there is often only one practitioner in a given location rendering that service vulnerable to total loss in the event of a retirement etc. As a result not only is there an erosion in numbers but the totality of experience is eroded at a greater rate than it is built up as the experience of a lifetime can't be easily or quickly replaced.

Lastly, there has been an increase in the activities required to service the organisation. This has occurred because of the increased necessity to demonstrate compliance with a myriad of issues, many of which are safety related and hence of the utmost importance. Other requirements have been shifted to technical and trade staff by the removal of support from in-house locations meaning that the support personnel are more remote and difficult to access or that the activity is devolved to the person requiring the service hence adding to the distraction from performing their primary tasks.

Currently 30% of every employee's time is assigned to these support duties with a total of 60% allocated to their primary role.

Examples of the adverse effects:

As an AMWU delegate for nine years I have seen the erosion of technical/trade personnel reflected in member numbers which have halved in that time to a total of forty. Most retirees were long term employees with a conservative estimate of the length of service being twenty years. This implies a loss of approximately eight hundred man-years of experience, not replaced even in part by the sporadic and haphazard recruitment that has taken place in that period. In that time I have seen technical positions lost to "professional" recruits because of the "more bang for bucks" outlook on worker value and the desire to move away from costly hardware facilities toward lower cost software oriented activities.

I am a team member which operates the ASRAAM Instrumentation Pod (example 3 of the AMWU booklet). Activities include the incremental development of the system over the past 10 years and the conduct of equipment trials to develop the ASRAAM performance as required. The demands of trials activities, two to three trials each year with six weeks minimum disruption to other duties for each trial, has meant that developmental activities (redesign of equipment racks for enhanced operation and quicker installation time) deemed a priority have taken three years to implement rather than the six months that is feasible with the proper resourcing. Within the group itself, in the near past all trial activities could be undertaken by personnel within the group without compromising operations. At present with the trial activity of the current year the personnel have to be drawn from other groups in the branch because of the lower numbers of technical support personnel available.

This issue is not confined to DSTG alone but also impacts a joint collaboration with Adelaide University (which seems to suffer similar problems to Defence). In this instance the Environmental Luminescence Group, jointly established by U of A and DSTG has funding applied which is insufficient to employ even casual employees to carry out the vital technical support activities (calibrations, maintenance and laboratory management). As a result, research effort is slowed or even stopped as the needs of management and unserviceable equipment trump any research priority. Keep in mind, the research activity is the reason for the existence of the group. This is an extreme example of a facility, which is asset rich, being starved of the personnel resources required to actually function at all.

Solution:

- A general admission that the do-it-yourself model of clerical activity is wasteful of the increasingly scarce technical personnel
- Accommodate a career progression model such that recruits are trained, inducted and developed into an organisation over their working life and that they mentor the new recruits

- Implementing a structured recruiting program including proactively influencing the course structure of TAFE and university courses to tailor, to some degree, the graduate skills. As a part of this structure, explicitly track the recruits/trainees/apprentices to guide the program and EXCLUDE them from the staffing caps that has all but eliminated recruits from DSTG in the last 20 years.

I thank you for allowing me to make a submission to this important enquiry.

Peter G Hunter 13/10/15