NAVY'S RESPONSE
TO THE
SUBMARINE WORKFORCE
SUSTAINABILITY REVIEW
STATEMENT BY THE CHIEF OF NAVY

Vice Admiral Russ Crane AM, CSM, RAN

The Submarine Workforce Sustainability Review was commissioned in mid-2008 in response to evidence that a range of factors were placing pressure on the uniformed Navy people in the submarine workforce, and impacting Navy’s ability to generate the required level of capability from the Submarine Force.

The aim was to review the issues impacting and likely to impact on uniformed submarine workforce sustainability. The Review was to propose actions which will provide Navy with the assurance that it will have the ability in future to deliver and sustain the optimum submarine capability required of the Australian Defence Force.

Rear Admiral Rowan Moffitt conducted the Review. He made a number of proposals and adopted a comprehensive approach. He built on earlier reviews and surveys such as Project Klaxon (an internal Submarine Force attitude survey) and the Profile of Unit Leadership, Satisfaction and Effectiveness (PULSE) which identified a broad range of organisational and cultural challenges within the Submarine Force.

Rear Admiral Moffitt proposed a range of practical and executable solutions in the form of twenty nine recommendations, all of which I have agreed to implement.

When I received the Review in November 2008 I directed several actions to commence immediately. Other actions are being implemented within the framework of the Submarine Sustainability Program, in accordance with the five-phase Submarine Sustainability Strategy. The actions I have taken to date, and the approach being adopted to implement all twenty nine recommendations, are explained in greater detail in this document.

I thank Rear Admiral Moffitt for undertaking this important Review. Addressing the many challenges he identified is a key outcome of our New Generation Navy initiative. The Navy has embarked on a significant program of long-term reform to the Submarine Force that will enable our submariners to continue achieving professional excellence while ensuring they are well supported. The Submarine Sustainability Strategy will enable the Navy to develop a sustainable submarine workforce to generate the optimum sustainable capability into the future, and pave the way for the Collins Class submarines to transition to the next generation of Australian submarines.

R.H. CRANE
Vice Admiral, RAN
Chief of Navy
8 April 2009
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SECTION ONE

OVERVIEW OF SUBMARINE WORKFORCE CHALLENGES, INITIAL ACTIONS AND LOOKING AHEAD

CURRENT WORKFORCE SITUATION

The Submarine Force is experiencing a well-publicized shortfall in the number of qualified submariners available to crew our submarines. Whilst overall submariner numbers have stabilized over the past year, the workforce remains fragile due in particular to ongoing negative trends with certain submariner employment categories. Until these are rectified the workforce will not have achieved enduring stability.

Navy remains focused on rectifying the recruiting and retention challenges facing its Submarine Force. Navy will establish a Submarine Recruiting Task Force as quickly as possible in 2009, and has commenced an internal campaign to attract general service Navy officers and sailors to the Submarine Force, with advertisements in Navy News due to commence this month.

Several overseas recruits have joined the Submarine Force in the past year from the Royal Navy and the Canadian Forces. Significant additional funds have been allocated to pay for overseas recruiting and a Navy team is planning to visit the UK later this year to facilitate this. Navy is encouraging former Australian submariners who can still meet the high medical, fitness and psychological standards to consider rejoining the Submarine Force, with particular focus on recently separated members whose civilian job security is threatened by the current economic circumstances.

Retention has been a particular challenge for several years, with too many highly qualified and skilled submariners electing to leave the Navy at the end of their initial engagement periods. As a short-term response, the Navy introduced the Navy Capability Allowance in 2008, which has had a positive overall impact on submariner retention. The $60,000 allowance, which attracts an 18 month return of service obligation, has been taken up by about 81 percent of eligible submariners. Longer term retention issues will be addressed by implementing the Submarine Sustainability Review recommendations to make the Submarine Force a great place to work, where submariners and their families are well supported.

UNDERSTANDING THE PROBLEM

During the period 2007-08 three important bodies of work were undertaken to understand the various problems that had become evident in the submarine workforce:
• In 2007 Navy Headquarters initiated the Submarine Whole of Capability Workforce Review. This review, which is still underway, is testing the validity of existing submarine workforce structures and modeling new structures to support development of a sustainable submarine workforce.

• In 2007 the Submarine Force initiated Project Klaxon, an attitude survey which yielded evidence of poor morale based on a range of issues such as over work, lack of posting stability and lack of training opportunities for submariners. In 2008 the Submarine Force initiated several remedial actions arising from Project Klaxon.

• In early 2008 the Submarine Force initiated a Profile of Unit Leadership, Satisfaction and Effectiveness (PULSE) analysis, which again yielded evidence of widespread pessimism about the sustainability of the Submarine Force, frustration at lack of action in solving submarine manning problems, high stress, extreme fatigue and low commitment to staying in the Navy.

In response to these clear indicators and warnings, Navy commissioned Rear Admiral Moffitt to undertake the Submarine Sustainability Review, which included consideration of Project Klaxon and PULSE outcomes and was informed by the outcomes to date of the Submarine Whole of Capability Workforce Review. The Review discovered that the reasons for the current situation are many, with complex inter-relationships. The sustained boom in the Western Australian economy has played its part in attracting submariners into higher paying mining jobs over the past decade. But that impact has probably been greater than it might otherwise have been because of three key underlying issues: the way Navy manages and treats its submariners; the way Navy operates its submarines; and the passion and professionalism of the submariners themselves, who have a powerfully 'mission focused' ethos which is often to the detriment of the workforce.

The Review offers a range of recommendations about how to manage the people and the platforms differently so as to lessen the burden on individuals and restore to them a more normal and sustainable work-life balance. At the same time, the Review recommends focusing the necessary effort on recruiting and training more submariners and achieving sustainable retention levels. Finally, the Review recognizes that there is a need to change the prevailing submarine culture so that its positive aspects (e.g. pursuit of professional excellence and pride in accomplishing complex and highly risky missions) are retained, while negative aspects (e.g. obsessive mission focus at the cost of burning out the people) are eliminated. There is a need to reach a sustainable submarine culture whereby mission focus is counterbalanced by a heightened regard for the wellbeing of the submariners and their families.
INITIAL ACTIONS AND QUICK WINS

A number of actions have commenced in response to the Review, based on some of the Review recommendations and building on the earlier reforms initiated within Navy Headquarters and the Submarine Force in response to Project Klaxon and PULSE. Initial indications are that these remedial actions, which are being progressively implemented, are proving to be quick wins in terms of having a positive impact on the morale and work experience of our submariners. These quick wins to date are:

- New Duty Watch arrangements were trialed in HMAS Collins in dock over the 2008-09 Christmas-New Year period. Suitably qualified civilian contractors were hired to replace some members of the ship's Duty Watch, thus freeing up some crew members to take leave and reducing the watch keeping workload for the entire crew. The trial was a success and these new arrangements will be rolled out progressively to all submarines undertaking dockings.

- An increase in the size of the submarine crew from 46 to 58, in accordance with Review recommendation 15. HMAS Farncomb's crew was increased in December 2008 and an establishment will be in place by mid-2009 for two more crews to be increased, once detailed workforce modeling has been completed. This action has been well received by the submarine community and initial feedback from HMAS Farncomb indicates that it is working well because it enables crew members to have a more sustainable duty cycle at sea, while providing the Commanding Officer with more flexibility within the crew to manage short-term personnel deficiencies.

- Establishment of a Submarine Support Group (SSG) of 27 people to provide 'fly in, fly out' support services to submarines in port, in accordance with Review recommendation 17. SSG personnel augment the crew for high priority maintenance and administrative tasks and provide some operational reliefs and force protection services by augmenting the submarine Duty Watch. The SSG enables submarine crews to gain extra rest and shore respite after their return from operations at sea. Over the next two years the SSG will be expanded in size in order to provide a broad range of support services to provide crews with more rest and respite in port.

- Provision of internet and intranet access to submarines, in accordance with Review recommendation 1. A project has commenced with a view to a phased approach for an interim LAN solution to be installed in operational submarines by mid-2009, with
a longer-term fixed solution being implemented progressively as submarines undertake periodic refits.

- Relocation of the Submarine Communications Centre from the east to Fleet Base West at HMAS Stirling, in accordance with Review recommendation 6. Funding for this project has been approved and the relocation is scheduled for completion by the end of 2009. This will provide twelve additional shore-based jobs in the west, resulting in improved posting stability and incentives to remain in the Navy for submarine communications sailors and their families.

- A new ‘try before you buy’ internal recruiting program will commence this year aimed at attracting more junior sailors and junior officers into the submarine service. For example, a number of graduates of each recruit course and each junior officer application course will be given an obligation-free opportunity to visit a submarine and the training facilities in HMAS Stirling and undertake a week-long course aimed at determining their suitability for submarine service. This will be the first of a series of ongoing internal recruiting initiatives linked to the implementation of Review recommendation 25.

- In support of the internal recruiting program, HMAS Farncomb’s program for the period February-March 2009 was adjusted to include sea days for trainees from the Recruit School at Westernport in Victoria and officers under training attending the Royal Australian Naval Collage at Jervis Bay, NSW. This will become routine.

- In further support of the internal recruiting program, a submarine senior sailor has been posted to the Recruit School to inform recruits about submarine career options with the aim of influencing a greater uptake of applications for submarine service. More effort will be taken to enshrine this into standing career management arrangements.

NEXT STEPS

To give effect to key workforce recommendations in the Review, Navy and Defence will continue a range of workforce planning activities. These will address not only the sustainable crewing construct but also the Submarine Support Group and all the shore areas that contribute to the production of submarine capability across Navy and the broader Defence community.

The success of stabilizing the submarine workforce over the next two years will be measured by achieving three sustainable crews and a sustainable Submarine Support Group and shore positions. With this stabilized
workforce as the foundation, Navy will move to a recovery phase to achieve a fourth sustainable crew.

The Submarine Force has developed a new approach to managing crews by keeping crews together and rotating them between available hulls, thus breaking the traditional attachment of one crew to one submarine. Although not a strict multi-crewing construct, this concept works well with the crews of Hydrographic Ships and patrol boats.

As proposed in the Submarine Workforce Sustainability Review, Navy will also evaluate the viability of the requirement for more crews, taking into account capability output requirements and the respite needs of our submariners.

LINKS TO FUTURE SUBMARINE CAPABILITY

The actions being implemented to achieve a sustainable submarine workforce will provide Navy with a firm basis for transitioning from the Collins Class submarines to the next generation of submarines, should that be required by the Government. Navy is already working closely with the Future Submarine Program (Project SEA 1000) to provide workforce sustainability considerations from the Submarine Sustainability Review into initial workforce design options for the Future Submarines.

CONCLUSIONS

A major program of work has commenced within Navy to implement the recommendations of the Submarine Workforce Sustainability Review. This will be a key outcome for New Generation Navy. Navy’s Submarine Sustainability Strategy has already realised some quick wins and is making progress towards its aim of developing a sustainable submarine workforce which generates optimum sustainable submarine capability into the future.
SECTION TWO

NAVY’S RESPONSES TO THE RECOMMENDATIONS OF THE SUBMARINE WORKFORCE SUSTAINABILITY REVIEW

This section sets out Navy’s detailed responses to the twenty nine recommendations of the Submarine Workforce Sustainability Review. It should be read in conjunction with the previous section, which provides the background and context for Navy’s responses.

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<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>1. Collins Class Local Area Network (LAN)</td>
<td>AGREEED Navy will implement an interim solution by 31 August 2009 for the first submarine and for all operational submarines by 31 December 2009. Navy will implement a permanent LAN solution in all operational submarines by 31 December 2010. Quarterly progress reports will be provided to the Submarine Sustainability Program Steering Group commencing March 2009 until project completion.</td>
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<tr>
<td>2. Strategic Review of Navy Engineering</td>
<td>AGREEED Navy will undertake a formal Review of Naval Engineering. Costed options and recommendations will be presented to the Submarine Sustainability Program Steering Group by 31 October 2009.</td>
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<tr>
<td>3. Workforce Structures</td>
<td>AGREEED Under the auspices of the Submarine Whole of Capability Workforce Review, Navy will develop a sustainable workforce structure and ship’s company organisational model</td>
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<td>RECOMMENDATION</td>
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| 4. Review Placements in GOPS and GORPS  
Navy should examine the anomalies in the Graded Officer Pay Structure and the Graded Other Ranks Pay Structure that have been identified by the submariners, in consultation with the submarine community, with the eventual outcomes and the reasons for them being carefully explained to the submariners. | AGREED  
In conjunction with action for recommendation 5, Navy will examine the current submariner work value placements in GOPS and GORPS and explain to the submarine community the reasons for them by 30 April 2009. |
| 5. Review Payment Points for Service Allowance  
Navy should review the point at which payment of Service Allowance starts for all submariners. | AGREED  
In conjunction with action for recommendation 4, Navy will review the point at which payment of Service Allowance starts for all submariners and develop and deliver, by 30 April 2009, a comprehensive message for the submarine community explaining all allowances and remuneration entitlements. |
| 6. SubComcen Location  
The proposed rearrangement of the submarine communications shore support infrastructure and management should go ahead as soon as possible. | AGREED  
Navy has gained Defence funding approval and this project is now proceeding, with the aim of relocating the Submarine Communications Centre from the east to Fleet Base West by the end of 2009. |
| 7. Living-In Accommodation in the West  
Additional living-in style accommodation for junior sailors in Western Australia should be procured as a matter of priority. | AGREED  
HMAS Stirling is part of the Defence Single Living Environment and Accommodation Precinct (LEAP) Project Phase 2 that will deliver new Living-In Accommodation in the 4-5 year timeframe.  
Navy will monitor progress of this major Defence infrastructure project, with quarterly consideration by the Submarine Sustainability Program Steering Group commencing in May 2009. Navy will ensure available LIA at HMAS Stirling is managed efficiently and effectively. |
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<td><strong>8. Review of Training</strong>&lt;br&gt;A fundamental overhaul of the current approach to delivering training should be undertaken, with a view to moving to a phased training delivery, 'just in time' model within a flexible training continuum that offers individuals some measure of choice and that leads to meaningful, worthwhile qualifications that have civilian accreditation.</td>
<td><strong>AGREED</strong>&lt;br&gt;Navy will undertake a formal Training Pipeline Review (TPR) and present costed options and recommendations to the Submarine Sustainability Program Steering Group in September 2009. In addition, Navy will undertake a formal Review of Technical Employment &amp; Training Requirements (RTETR). Costed options and recommendations will be considered by the Submarine Sustainability Program Steering Group in September 2009.</td>
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<td><strong>9. Simulation Systems</strong>&lt;br&gt;The proposals for development of the submarine training facilities through upgrade of existing systems and acquisition of new systems should be given priority.</td>
<td><strong>AGREED</strong>&lt;br&gt;Navy will undertake submarine training system reinvigoration within the context of endorsed White Paper guidance and Navy-wide requirements for Defence Joint Project 3028. Costed options and recommendations will be considered by the Submarine Sustainability Program Steering Group iaw the Defence Capability Plan Year of Decision schedule.</td>
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<td><strong>10. Classified recommendation</strong></td>
<td><strong>AGREED</strong>&lt;br&gt;Classified response</td>
</tr>
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<td><strong>11. Clearly assign responsibility, authority and accountability, preferably to one person who has no other responsibilities. He should be directly responsible to CN through DCN. Once the recommendations to be acted upon are decided, a campaign approach should be adopted which must include consultation with submariners and a carefully crafted information strategy for advising the Government, senior Defence leaders and the wider Navy community.</strong></td>
<td><strong>AGREED</strong>&lt;br&gt;The Deputy Chief of Navy (DCN) is responsible and accountable for successfully implementing all endorsed Review recommendations. DCN leads the Submarine Sustainability Program (see Section Three below), linked to the New Generation Navy strategy. It is a management framework with appropriate performance measures and targets against timelines to measure and monitor progress of implementing these recommendations. DCN provides monthly progress reports on Review implementation to the Submarine Sustainability Program Steering Group.</td>
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<td>RECOMMENDATION</td>
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| **12. The Goal**  
The mid-term goal for crewing the submarines, once the workforce situation has been stabilised and numbers allow, should be to flexi-crew on the basis of three crews per two submarines. | AGREED  
Navy will complete a study within 3 years of achieving and maintaining four sustainable crews and a sustainable Submarine Support Group, and not later than December 2014, recommending options. The requirement for the 3:2 crews to platforms ratio needs to be tested for feasibility, achievability and resource implications. Navy will not commit to a flexi/multi crewing regime without fully understanding these issues. |
| **13. A Sydney-Based Submarine Crew**  
A study should be conducted to ascertain the management issues, cost and viability of sustaining one submarine crew based in the East. If this appears to be potentially viable a trial should be conducted once three sustainable crews have been established in the West. | AGREED IN PRINCIPLE  
Navy will commission a study and present fully costed options and recommendations to the Submarine Sustainability Program Steering Group by February 2010. |
| **14. Respite Guidelines**  
Strict guidelines on minimum and optimum respite and maximum allowable continuous sea service should be developed, in consultation with the submariners and health and other professionals. | AGREED  
Navy will commission an independent review of current Navy respite guidelines in light of new sustainable crewing and support constructs. Realistic guidelines will reflect the establishment of 'home tempo' measures being introduced across Navy. The review will consider the relevance to current contemporary respite expectations and within the context of the Chief of Navy's New Generation Navy strategy. The review will be completed by 30 November 2009. |
| **15. Enhanced Scheme of Complement**  
An enhanced Scheme of Complement (crewing plan) should be introduced based on the work undertaken by the Director Naval Workforce Planning and the Defence Science and Technology Organisation. How it would be managed would need to be worked and agreed, and operating budgets developed. It should incorporate a small Supply Sustainability Program Steering Group. | AGREED  
The enhanced scheme of complement (SOC) is better described as a **sustainable** SOC, or crewing plan. In essence, it will expand the current number of crew members onboard each submarine from 46 to 58 positions in order to achieve better training, crew respite and workforce structural integrity. Navy established a sustainable SOC in HMAS |
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<th>RECOMMENDATION</th>
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<tr>
<td>Department, including a junior Supply Officer.</td>
<td>Farncomb in December 2008 and will establish new sustainable schemes of complement in two additional submarines by 2010-11. A fourth sustainable SOC will be established by 2011-12.</td>
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16. Revised Scheduling Model
The boats should be programmed along the lines of the four part cycle described. | AGREED
Navy will change the submarine scheduling model by mid-2009, to reflect the intent of this recommendation, with a view to adopting the full four-part cycle described in the Review once four sustainable crews are achieved. |

17. Enhanced Support Group
The existing Submarine Response Group should be evolved into a Submarine Support Group (SSG) that would provide the balance of people, above the additional ship's company members in the Enhanced Scheme Of Complement, to provide 'fly-in, fly-out' support to submarines alongside away from home port, so that the respite guidelines can be met. | AGREED
Navy established the Submarine Support Group in early 2009 with an interim staffing level of 27 personnel. Navy will develop a sustainable Submarine Support Group concept of operations and operating budget by 30 September 2009 and ensure the Submarine Support Group is fully staffed (approximately 35 personnel, subject to final modelling) by December 2010. |

18. Revised Submarine Capability Workforce Design
A revision of the design of the Navy-owned components that support production of the submarine capability should be undertaken, based on experience gained using the Enhanced Scheme of Complement, revised scheduling model and Enhanced Submarine Support Group approaches. | AGREED
Navy will fill submarine shore positions that support the production of submarine capability by December 2010. |

19. Alongside Accommodation Standards
Values-based guidelines covering the style of accommodation for a ship's company when a submarine is alongside away from home port, along the lines described, should be developed and applied. | AGREED
Navy will develop and implement new values-based guidelines covering the style of accommodation for a ship's company when a submarine is alongside away from home port, by mid-2009. |
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<tr>
<td>20. Devolved Submariner Career Management</td>
<td>AGREED IN PRINCIPLE</td>
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<tr>
<td>Career management of submariners should be devolved to the Submarine</td>
<td>Navy will implement, by 31 December</td>
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<tr>
<td>Force Element Group and undertaken by a new cell staffed properly for the</td>
<td>2009, An officer career management shopfront</td>
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<td>purpose. It should be responsible to Director General Naval Personnel and</td>
<td>at HMAS Stirling. This shopfront will be</td>
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<tr>
<td>Training for complying with the necessary regulations and responsive to the</td>
<td>responsive to the Submarine Force Element</td>
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<td>Submarine Force Element Group Commander for all submarine junior officer</td>
<td>Group Commander for all submarine junior</td>
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<td>postings (up to Lieutenant Commander/Executive Officer/Head of Department),</td>
<td>officer postings (up to Lieutenant Commander/</td>
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<td>but postings and career management will remain the responsibility of the</td>
<td>Executive Officer/Head of Department), but</td>
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<td>Director of Naval Officers Postings. Six monthly reports on the effectiveness</td>
<td>postings and career management will remain the</td>
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<td>of this initiative will be provided to the Deputy Chief of Navy, commencing</td>
<td>responsibility of the Director of Naval</td>
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<td>June 2010 until further notice.</td>
<td>Officers Postings. Six monthly reports on</td>
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<td>the effectiveness of this initiative will be</td>
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<td>provided to the Deputy Chief of Navy,</td>
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<td>commencing June 2010 until further notice.</td>
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<td>21. Leadership and Interpersonal Skills Assessment System</td>
<td>AGREED IN PRINCIPLE</td>
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<tr>
<td>A modern 360 degree reporting system should be introduced, as a trial, in</td>
<td>Navy, in consultation with the Deputy</td>
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<td>the submarine Force Element Group. It must be administered from outside the</td>
<td>Secretary People Strategies and Policy (DepSec</td>
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<td>Force Element Group. Reporting should be focussed on the leadership and</td>
<td>PSP), will implement a Leadership and</td>
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<td>personnel management skills of all submariners of Petty Officer rank and</td>
<td>Interpersonal Skills Assessment System in the</td>
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<td>higher. The reports raised under such a system should be made available to</td>
<td>Submarine Force by 31 Aug 09 using HR tools/</td>
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<td>the Submarine Force Element Group Commander and the Director General Naval</td>
<td>approaches that best meet the intent of this</td>
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<td>Personnel and Training as well as the reportee, and both should report on</td>
<td>recommendation. A report on the effectiveness</td>
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<td>progress of the trial to the Chief of Naval Staff's Senior Advisory Committee.</td>
<td>of this system and recommendations for the</td>
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<tr>
<td>Arrangements should be put in place, in parallel, for providing counselling,</td>
<td>best way ahead will be considered by the</td>
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<td>training, coaching and mentoring to those people identified as having skills</td>
<td>Submarine Sustainability Program Steering</td>
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<td>in these areas that are not of the required standard. Such people who are</td>
<td>Group by 30 June 2010.</td>
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<td>unable or unwilling to respond should be restricted from occupying key</td>
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<td>leadership positions.</td>
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### RECOMMENDATION

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<tr>
<th>22. Senior Submariner Positions</th>
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<tr>
<td>The Chief of Navy might consider appointing a senior Captain in command of the Submarine Force Element Group once the rebuilding program is well underway and, in conjunction, consider the placement of a submariner Captain (or Commodore) permanently in Canberra and the broader command and control ramifications that might flow from those decisions.</td>
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<td>Current arrangements will be retained until the necessary cultural change in the Submarine Force has had the desired effect. This recommendation will be reconsidered at the end of 2009.</td>
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<th>23. Junior Technical Sailor Careers</th>
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<tr>
<td>Junior technical sailor career patterns must be redesigned to remove the jobs that are unsatisfying because they do not enable skills enhancement. Action is needed urgently to enter into arrangements for embedding with contractors and Original Equipment Manufacturers.</td>
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<tr>
<td>Navy will include consideration of junior technical sailor careers within the scope of the Review of Naval Engineering (RNE) (recommendation 2). Navy will continue with local initiatives within the Submarine Force for submarine junior technical sailors until RNE findings and recommendations are agreed and implemented.</td>
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<td>The Chief of Navy might consider engaging a wise old non-submariner to undertake a short study of whether and in what ways Navy and the submarine force might benefit from deliberately promoting submarines as an elite force.</td>
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<tr>
<td>Navy has commissioned a study, which started in March 2009 and will be completed in mid-2009. The recommendations of that study will be considered by the Submarine Sustainability Program Steering Group in the latter half of 2009.</td>
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<td>RECOMMENDATION</td>
<td>RESPONSE</td>
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<tr>
<td>25. Submarine Recruiting Task Force Establish a Submarine Recruiting Task Force (SRTF) to:</td>
<td>AGREED Navy will establish the Submarine Recruiting Task Force as quickly as possible in 2009.</td>
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<tr>
<td>- develop and run a recruiting campaign;</td>
<td>Navy has commenced an internal publicity campaign to attract general service Navy officers and sailors to the Submarine Force, with advertisements in Navy News due to commence in April 2009.</td>
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<tr>
<td>- promote close engagement and cooperation with Defence Force Recruiting (DFR), including the provision of submariners to assist in their recruiting efforts;</td>
<td>Defence Force Recruiting is targeting submariners in its external recruiting and marketing activities.</td>
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<tr>
<td>- undertake aggressive recruiting activities across the Australian Defence Organisation; and</td>
<td>Navy is devoting additional resources towards attracting qualified submariners from suitable foreign navies. Several lateral recruits have joined the RAN from the Royal Navy and Canadian Forces in the past twelve months. A Navy team is planning to visit the UK in 2009 to facilitate further lateral recruitment.</td>
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<tr>
<td>- establish targeted ongoing communication with ex-submariners.</td>
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<tr>
<td>Among other ideas that may emerge, the SRTF should develop and run publicity campaigns internal to Defence and examine the value of establishing permanent submarine career advisory shopfronts at HMAS Cerberus and a convenient location in Sydney, as a minimum.</td>
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26. Review of SUBSAFE
The SUBSAFE System should be subject to independent review and thorough overhaul to bring it into line with contemporary safety management standards and ensure it is effective across an appropriately wide scope of the whole submarine capability, rather than being restricted to watertight integrity of the submarine.

AGREED IN PRINCIPLE Navy will commission a review of SUBSAFE by a subject matter expert. Outcomes and recommendations will be reported to the Chief of Navy by September 2009.

27. Development of Navy’s Executives
Navy should examine the efficiency of the current means by which its executives are equipped to achieve success in the Defence business model both by career path and formal training.

AGREED Navy is implementing this recommendation in mid-2009 as part of the Chief of Navy’s New Generation Navy strategy. A comprehensive executive development program will be introduced as part of a new Leadership and Ethics program.
<table>
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<th>RECOMMENDATION</th>
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<td><strong>28. Navy Culture</strong>&lt;br&gt;Navy should undertake a cultural self-assessment and re-definition program, with a view to defining and implementing the leadership culture that is required for future success in the labour market as well as in combat in the maritime environment.</td>
<td><strong>AGREED</strong> Navy is implementing this recommendation in mid-2009 as part of the Chief of Navy's New Generation Navy strategy. Leadership and Ethics programs, and Culture and Values programs, will be introduced for all Navy personnel from initial entry level to senior executive level.</td>
</tr>
<tr>
<td><strong>29. A Look at the RAAF</strong>&lt;br&gt;Navy should examine the RAAF Aircrew Sustainability Review methodology and outcomes and the RAAF Adaptive Culture Program for applicable lessons.</td>
<td><strong>AGREED</strong> Navy reviewed these RAAF programs in early 2009, conducted interviews with key RAAF personnel involved in developing and delivering these programs, and incorporated applicable lessons into the design of the Chief of Navy's New Generation Navy strategy.</td>
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SECTION THREE

THE SUBMARINE SUSTAINABILITY PROGRAM

The Submarine Sustainability Program is a key plank of NGN and will drive the implementation of the Review recommendations through to completion and ensure their collective intent is successfully achieved. It is being conducted in accordance with the five-phase Submarine Sustainability Strategy (described below) from now until about 2015.

Led by the Deputy Chief of Navy, the Submarine Sustainability Program has full-time staff at Navy Headquarters in Canberra working in close cooperation with the Submarine Force Commander and his staff in Western Australia. The Program provides the management framework for coordinating, monitoring, reporting and implementing the Review recommendations, each of which will be treated as individual projects.

The Chief of Navy has appointed two star and one star level senior Navy officers to be responsible and accountable for successfully implementing particular projects in accordance with Navy’s response to the Review recommendations. They will provide monthly project progress reports to the Submarine Sustainability Program Steering Group, comprising the Chief of Navy and the officers and officials who make up his Senior Advisory Committee. This regular reporting regime ensures appropriate Program governance and oversight. It enables the Chief of Navy to respond quickly and take decisive corrective action if any of the individual projects within the overall Program are experiencing setbacks against agreed project performance criteria.

NAVY’S SUBMARINE SUSTAINABILITY STRATEGY

Navy will develop a sustainable submarine workforce which generates optimum sustainable submarine capability, now and into the future. To achieve this end state Navy has implemented the five-phase Submarine Sustainability Strategy (see attached diagram) comprising the following elements:

- **Phase 1 (2008) – Analyse.** This phase, which is complete, included conduct of the Submarine Workforce Sustainability Review and other surveys to understand the problem, followed by implementation of initial actions and quick wins.

- **Phase 2 (2009-2011) – Stabilise.** This phase will achieve three sustainable crews of 58 personnel each (previously there were 46 in a crew), supported by a Submarine Support Group of 27 people to
provide high priority technical and administrative support services to crews in port.

- **Phase 3 (2011-2012) – Recover.** This phase will achieve a fourth sustainable crew of 58 personnel to consistently meet Submarine readiness requirements; a fully-manned and sustainable Submarine Support Group providing a broad range of support services to crews; and sustained manning of submarine shore positions.

- **Phase 4 (2012-2015) – Consolidate.** This phase will include evaluating alternative crewing arrangements (3 crews to 2 platforms – Review recommendation 12) by evaluating the need for more crews, depending on the effectiveness of the new construct of four sustainable crews backed up by a fully resourced Submarine Support Group.

- **Phase 5 (2015 onwards) – Grow.** This phase will implement workforce expansion plans, if required to do so by the Government, and lay the foundations for transition from the Collins Class submarines to Future Submarines (Project SEA 1000).
NAVY'S SUBMARINE SUSTAINABILITY STRATEGY

VISION:
A SUSTAINABLE SUBMARINE WORKFORCE
WHICH GENERATES THE OPTIMUM SUSTAINABLE SUBMARINE CAPABILITY
NOW AND INTO THE FUTURE

NEW GENERATION NAVY
SM SUSTAINABILITY PROGRAM

The Framework for Implementing the
Proposed Navy's Sustainability Program

SM will formally direct 3rd and 4th
Phases, project leads

SM Sustainability Review & others
(PCG, PSC)

- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

Phases:

PHASE 1 PHASE 2 PHASE 3 PHASE 4 PHASE 5

ANALYSE STABILISE RECOVER CONSOLIDATE GROW

PHASE 1 - PHASE 2
ANALYSE - UNDERSTAND THE PROBLEM, COMMENCE INITIAL REMEDIATION ACTIONS
- Conduct Submarine Sustainability Review & others (PCG, PSC)
- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

PHASE 2 - PHASE 3
STABILISE - ACHIEVE 3 SUSTAINABLE CREWS (38) + FULL SSG
- Conduct Submarine Sustainability Review & others (PCG, PSC)
- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

PHASE 3 - PHASE 4
RECOVER - 4 SUSTAINABLE CREWS (38) + FULL SSG + SHORE BILLET
- Conduct Submarine Sustainability Review & others (PCG, PSC)
- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

PHASE 4 - PHASE 5
CONSOLIDATE - EVALUATE VIABILITY OF CONCEPTS GENERATING NEW GENERATION NAVY
- Conduct Submarine Sustainability Review & others (PCG, PSC)
- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

PHASE 5 - PHASE 6
GROW - TO MEET WHITE PAPER FORCE STRUCTURE REQUIREMENTS IF REQUIRED
- Conduct Submarine Sustainability Review & others (PCG, PSC)
- Develop and execute implementation plan
- Complete initial first aid actions - bigger crew (38)

First aid

3 crews

4 crews

Crewing evaluations
REPORT
OF THE
REVIEW OF SUBMARINE WORKFORCE SUSTAINABILITY

31 OCTOBER 2008

undertaken by
REAR ADMIRAL R.C. MOFFITT AO, RAN
EDITORIAL APPROACH

This document is an unclassified version of the original Submarine Workforce Sustainability Review, which carries the national security classification of SECRET.

This unclassified version has been redacted as it would be for an official request for access under the Freedom of Information Act 1982 (the Act). Material from the original classified document has been omitted which is exempt under relevant sections of Part IV of the Act. Omissions in this case include original content that cannot be disclosed under the following provisions of the Act:

- Section 33 – documents affecting national security, defence or international relations
- Section 41 – documents affecting personal privacy
- Section 43 – documents relating to business affairs

The omissions equate to about 10 per cent of the content of the original Submarine Workforce Sustainability Review.
“We as an organisation need to think outside the box, EVERYTHING that has been easy, traditional and conservative and employed thus far has FAILED dismally. We need to get outside the box and really make changes and make them now, slow action.....will kill us, if it has not already. Something tangible and highly visible and NOT monetary needs to be done and seen to be supported by our Snr Sirs and it needs to happen immediately.”

Lieutenant Commander
Submariner
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<th>Australian Submarine Corporation, now simply ASC</th>
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<td>CCLAN</td>
<td>Collins Class local area network</td>
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<td>CIS</td>
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<td>CJOPS</td>
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LIST OF KEY OBSERVATIONS AND RECOMMENDATIONS

Key observations appear throughout the report in blue boxes. The recommendations appear in orange boxes in the report and are shown below in bold text.

Chapter 2 The State of Play

To achieve and sustain a recovery of the submarine capability, corrective action is needed that targets considerably improved and sustained retention, consistently higher recruitment to the submarine force, both at entry level and laterally, at higher rank level from within Navy, together with measures that can assure prevention of this situation developing again.

If not addressed, the damaging cultural issues of the submarine community will most likely limit the benefits of organisational change.

Notwithstanding the prevailing financial uncertainty, the existing economic climate in Western Australia emphasises the need for prompt action to address the issues outlined in this report to stem the flow and attract people to submarines in the numbers required.

Chapter 3 People (Part 1) – The Submariner’s Views

Navy must give submariners a strong commitment to allowing respite and providing much better predictability, then deliver on that commitment reliably, consistently and in a sustained manner. Changes are needed urgently to the way in which the submarine capability is managed to deliver this outcome.

The submarine crewing model needs to be re-thought to lift a large burden of work from the submarine ship’s company and put in place significant additional external support for the boats, as well as providing much better career development opportunities.

There seems to be a need to consider a different model for managing submariner careers broadly and officers’ careers particularly.
New frameworks that might be possible under existing policies, and possible policy changes covering employment in submarines that mitigate the issues associated with the force being based in Western Australia need to be developed.

**Recommendation 1  ‘Collins Class LAN’**
The CCLAN project should be re-energised and properly funded as a matter of priority, in order to achieve installation as rapidly as possible.

**Chapter 4  People (Part 2) – Other Observations**

Many factors have probably contributed over time to a steady decline in junior submariner experience levels, which must be addressed.

Navy must become much more active and aggressive in recruiting submariners, especially from among in-service people, if a sustainable submarine workforce is to be achieved. A coordinated, whole of Navy approach and campaign is called for, which must involve submariners but which must not be left to them alone. It must be sustained permanently as part of Navy’s ‘business as usual’.

Navy needs to decide what direction it wants taken on the direct, semi-direct and directed recruiting approaches to generating submariners then enforce that decision.

There are most likely ex-submariners who’s service could be engaged if Navy could be more flexible in tailoring employment options that meet their needs.

**Chapter 5  Major Systems**

We will continue to achieve lower than the theoretical best platform availability for a range of reasons that are part of the ‘normal state’ under the philosophy with which the RAN approaches submarine ownership. Submarine availability imposes the limit on capacity to generate submariners.

There will always be material differences between boats for this reason, sometimes quite major in nature. This will complicate ship’s company management.

**Chapter 6  Organisation**

There appears to be a need for senior operational submarine expertise in Canberra, perhaps in the key functional areas of Navy headquarters.
Recommendation 2  ‘Strategic Review of Navy Engineering’
A comprehensive strategic review of the role of engineering in generating Navy capability broadly and the submarine capability in particular should be undertaken, as a matter of priority.

The Collins Class crewing concept is flawed and has led to practices and behaviours that have damaged submarine workforce sustainability.

Recommendation 3  ‘Workforce Structures’
Navy needs to undertake a ‘whole ship review’ to reassess its workforce structures and ship’s company organisation models, as a precursor to the overhaul of the current approach to delivering training (see Chapter 10).

The demise of ‘The Squadron’, as it was when the submarines were based at HMAS PLATYPUS, is an issue that warrants further examination and better understanding, in the context of consciously deciding whether to exploit the potential that exists for recovery in the notion of the submarine force being explicitly held up as an elite Navy force.

Recommendation 4  ‘Review Placements in GOPS and GORPS’
Navy should examine the anomalies in GOPS and GORPS that have been identified by the submariners, in consultation with the submarine community, with the eventual outcomes and the reasons for them being carefully explained to the submariners.

The NCA and the way it was applied received a resounding and almost unanimous ‘thumbs down’ from the submariners.

Recommendation 5  ‘Review Payment Points for Service Allowance’
Navy should review the point at which payment of Service Allowance starts for all submariners.

More needs to be done to obtain civil accreditation of the training we provide, as well as structuring and timing how we award accredited qualifications to achieve the best retention effect.

Navy needs to engage very closely with the work of the Review of Non-Financial Conditions of Service currently under way, to ensure that the interests of all Navy people are adequately taken into account by a project likely to have far reaching and very long term impacts for Navy.

Chapter 7  Command and Management

The submarine community must embark on a rebuilding program with a focus on retaining as many currently serving submariners as possible, recruiting and
training future submariners and establishing measures and structures to prevent relapse in future. A clear statement of the objectives to be achieved, with guidelines and limitations to moderate behaviour, will be a very important first step in setting this program in motion and getting all contributors pulling in the same direction. Responsibility for the outcome, authority and accountability must be clearly assigned, preferably with a single person.

There appears to be a pressing need for a system that reliably and formally alerts Navy to people with poor leadership skills, so that they can either be helped to conform to the standards required or restricted from leadership roles if they are unable to conform.

Navy should also make some attempt to better match personalities in key positions in a submarine, to avoid damaging impacts on the ship’s company.

Navy would benefit from an examination of the organisational structure with a view to making sure that a proper proportion of the available energy is focussed on managing Navy people. If necessary, internal Navy effort should be redirected away from platform management activity to achieve that outcome.

Chapter 8 Support

The generation and sustainment side of the submarine capability is a system in balance that is producing approximately what it is currently capable of producing. This is the 'rated output' of the system. Fine-tuning will probably not change the rated output dramatically.

If Navy were to accept that a demand to change the configuration of the boats, in the way and for the reasons outlined elsewhere in this report, is the normal state, the usage upkeep cycle is extended to the degree possible, and ASC had unconstrained resources to achieve the maximum output of boats for use, the number of boats theoretically available for use from the six boat fleet would probably be

Chapter 9 Facilities

Recommendation 6 ‘SubComcen Location’
The proposed rearrangement of the submarine communications shore support infrastructure and management should go ahead as soon as possible.
Recommendation 7  ‘Living-In Accommodation in the West’
Additional living-in style accommodation for junior sailors in Western Australia should be procured as a matter of priority.

Chapter 10  Training

Recommendation 8  ‘Review of Training’
A fundamental overhaul of the current approach to delivering training should be undertaken, with a view to moving to a phased training delivery, ‘just in time’ model within a flexible training continuum that offers individuals some measure of choice and that leads to meaningful, worthwhile qualifications that have civilian accreditation.

Recommendation 9  ‘Simulation Systems’
The proposals for development of the submarine training facilities through upgrade of existing systems and acquisition of new systems should be given priority.

Chapter 11  Supplies

Additional funding will be required to implement the recommendations in this report, should they be agreed. Navy’s budget, which appears to be constrained below the minimum requirement and lacks the flexibility of a significant discretionary component, will probably not be sufficient to initiate, and more importantly sustain, the very different way of doing business that will be required for a sustainable submarine workforce.

Chapter 12  Creating the Effects and Outcomes Required

Recommendation 11
Clearly assign responsibility, authority and accountability for responsibilities, preferably to one person who has no other responsibilities. He should be directly responsible to CN, through DCN.
Once the recommendations to be acted upon are decided, a campaign approach should be adopted which must include consultation with submariners and a carefully crafted information strategy for advising the Government, senior Defence leaders and the wider Navy community.

The domains within which outcomes must be achieved or effects created, and their elements are:

- **Life and Work Balance**
  - reduced workloads, and
  - assured respite and better predictability.

- **Support for Individuals**
  - career management arrangements, and
  - assessment of leadership and interpersonal skill.

- **Organisation**
  - senior submariner expertise in Canberra,
  - junior technical sailor employment, and
  - the submarine capability as an elite force.

- **Recruiting**

*Recommendation 12 – ‘The Goal’*
The mid-term goal for crewing the submarines, once the workforce situation has been stabilised and numbers allow, should be to flexi-crew on the basis of three crews per two submarines.

*Recommendation 13 – ‘A Sydney-Based Submarine Crew’*
A study should be conducted to ascertain the management issues, cost and viability of sustaining one submarine crew based in the East. If this appears to be a potentially viable a trial should be conducted once three sustainable crews have been established in the West.

*Recommendation 14 – ‘Respite Guidelines’*
Strict guidelines on minimum and optimum respite and maximum allowable continuous sea service should be developed, in consultation with the submariners and health and other professionals.

*Recommendation 15 – ‘Enhanced Scheme of Complement’*
An enhanced submarine Scheme of Complement should be introduced based on the work undertaken by DNWP and DSTO. How it would be managed would need to be worked and agreed, and operating budgets developed. It should incorporate a small Supply Department, including a junior Supply Officer.
Recommendation 16  'Revised Scheduling Model'
The boats should be programmed along the lines of the four part cycle described.

Recommendation 17  'Enhanced Submarine Support Group'
The existing Submarine Response Group should be evolved into a Submarine Support Group (SSG) that would provide the balance of people, above the additional ship's company members in the Enhanced SOC, to provide 'fly-in, fly-out' support to submarines alongside away from home port, so that the respite guidelines can be met.

The existing submarine SOC is not sustainable, which is one reason for the current workforce difficulties. This situation has driven behaviour that compounds the problem. The submariner culture fuels that behaviour. The causes are unsustainable structure and culture, the effect is destructive behaviour. Both causes must be addressed concurrently.

Recommendation 18  'Revised Submarine Capability Workforce Design'
A revision of the design of the Navy-owned components that support production of the submarine capability should be undertaken, based on experienced gained using the Enhanced SOC, revised scheduling model and Enhanced SSG approaches.

Recommendation 19  'Alongside Accommodation Standards'
Values-based guidelines covering the style of accommodation for a ship's company when a submarine is alongside away from home port, along the lines described, should be developed and applied.

Recommendation 20  'Devolved Submariner Career Management'
Career management of submariners should be devolved to the Submarine FEG and undertaken by a new cell staffed properly for the purpose. It should be responsible to DGNPT for complying with the necessary regulations and responsive to the Submarine FEG Commander.

Recommendation 21  'Leadership and Interpersonal Skills Assessment System'
A modern 360 degree reporting system should be introduced, as a trial, in the submarine FEG. It must be administered from outside the FEG. Reporting should be focussed on the leadership and personnel management skills of all submariners of Petty Officer rank and higher. The reports raised under such a system should be made available to the Submarine FEG Commander and DGNPT as well as the reportee and both should report on progress of the trial to CNSAC.
Arrangements should be put in place, in parallel, for providing counselling, training, coaching and mentoring to those people identified as having skills in these areas that are not of the required standard. Such people who are unable or unwilling to respond should be restricted from occupying key leadership positions.

Recommendation 22  ‘Senior Submariner Positions’
CN might consider appointing a senior Captain in command of the FEG once the rebuilding program is well underway and, in conjunction, consider the placement of a submariner Captain (or Commodore) permanently in Canberra and the broader command and control ramifications that might flow from those decisions.

Recommendation 23  ‘Junior Technical Sailor Careers’
Junior technical sailor career patterns must be redesigned to remove the jobs that are unsatisfying because they do not enable skills enhancement. Action is needed urgently to enter into arrangements for embedding with contractors and OEMs.

Recommendation 24  ‘An Elite Submarine Force?’
CN might consider engaging a wise old non-submariner to undertake a short study of whether and in what ways Navy and the submarine force might benefit from deliberately promoting submarines as an elite Navy force.

Recommendation 25  ‘Submarine Recruiting Task Force’
Establish a Submarine Recruiting Task Force (SRTF) to:
- develop and run a recruiting campaign,
- promote close engagement and cooperation with DFR, including the provision of submariners to assist in their recruiting efforts,
- undertake aggressive recruiting activities across the Australian Defence Organisation, and
- establish targeted ongoing communication with ex-submariners.

Among any other ideas that may emerge, the SRTF should develop and run publicity campaigns internal to Defence and examine the value of establishing permanent submarine career advisory shopfronts at HMAS CERBERUS and a convenient location in Sydney, as a minimum.

Chapter 13 Additional Observations

Recommendation 26  ‘Review of SUBSAFE’
The SUBSAFE System should be subject to independent and thorough review and overhaul if necessary, to bring it into line with contemporary safety management standards and ensure it is effective across an
appropriately wide scope of the whole submarine capability, rather than being restricted to watertight integrity of the submarine.

Recommendation 27 'Development of Navy's Executives'
Navy should examine the efficacy of the current means by which its executives are equipped to achieve success in the Defence business model, both by career path and formal training.

The decision to structure this report along FIC lines was taken, as noted in Chapter 1 'Introduction', to make it simpler to attribute tasks associated with implementing the recommendations made. It is interesting to observe here that it appears not to have turned out that way, with various authorities 'owning' subparts of the work that the Review identifies as being needed. One might conclude that if the organisation is not structured so that responsibility, accountability and authority are aligned comfortably around the fundamental inputs to capability then either they, or the organisation, need redefining.

Recommendation 28 'Navy Culture'
Navy should undertake a cultural self-assessment and re-definition program, with a view to defining and implementing the leadership culture that is required for future success in the labour market as well as in combat in the maritime environment.

Recommendation 29 'A Look at the RAAF'
Navy should examine the RAAF Aircrew Sustainability Review methodology and outcomes and the RAAF Adaptive Culture Program for applicable lessons.

It would be sensible to examine seriously the proposal to use one of the Collins Class submarines as a trials platform from which to develop the replacement class, in the event the Government decides to acquire one.
CHAPTER 1
INTRODUCTION

1.1 BACKGROUND TO THE REVIEW

The Chief of Navy (CN) commissioned the Review of Submarine Workforce Sustainability (the Review) to:

- develop a detailed understanding of the factors that are influencing Navy’s ability to assure a sustainable uniformed workforce for the submarine capability; and

- propose actions that might address those factors.

The Chief of Navy’s directive establishing the Review is at Attachment 1.

The review officer was tasked with advising CN on:

- the reasons for the current situation and the nature, extent and impact of the pressures being experienced;

- what submarine capability can be generated and sustained with the workforce currently available and in prospect for the next few years;

- what measures might be necessary in addressing the pressures identified, so as to achieve a stable uniformed submarine workforce that allows Navy to deliver and sustain the submarine capability required by Government; and

- the optimum sustainable peace time level of capability that could be generated from six submarines if there were no financial or people supply constraints and what size the uniformed submarine workforce would need to be to achieve that level of capability.

1.2 METHOD

In undertaking this review, the review officer:

- considered and analysed a range of reports of previous reviews and other documentary evidence relevant to the Review (see the Bibliography);

- conducted a series of structured meetings with serving submariners by rank group in HMAS STIRLING - estimated to total some 250 people;
• conducted personal interviews with submariners and other Navy people requested either by individuals or the review officer - estimated as about 50 people;

• considered and analysed some 40 responses resulting from a poll of approximately 200 submariners no longer serving in the Navy;

• considered and analysed solicited input from within Navy and from the Submarine Institute of Australia, the Submarine Association, the Naval Association of Australia and the Regular Defence Force Welfare Association, which resulted in some 150 submissions;

• consulted informally with the Royal Navy (RN), the United States Navy (USN), the Canadian Navy (CN), the Royal Netherlands Navy (RNIN) and the Indian Navy (IN);

• received and considered an unsolicited briefing from ASC Pty Ltd; and

• received and considered several unsolicited submissions from the families of serving submariners.

1.3 ASSUMPTION

The recommendations made in this report are based on the assumption that Australia is and will remain committed to sustaining a submarine force that has an effective level of capability against potential adversaries.

1.4 STRUCTURE OF THE REPORT

The range of factors impacting and influencing Navy's ability to generate and sustain the required submarine workforce is broad and complex. To ensure that these factors are identified and analysed in a logical manner, they have been grouped under the their respective (or most logical!) Fundamental Input to Capability (FIC) heading - people, organisation, major systems, training, command and management, supplies, facilities and support. This structure should make it simpler to attribute tasks associated with implementing the recommendations made.

Throughout the report, key observations are highlighted. These are brought together in Chapter 12, in which the effects or outcomes that are necessary for achieving a sustainable submarine workforce, the options available for achieving them and the recommended courses of action are all identified. Additional observations on other matters of relevance that emerged during the course of the Review are detailed in Chapter 13.

Where used, quotations generally describe a situation as it is broadly accepted as being among the majority of submariners.
CHAPTER 2

THE STATE OF PLAY

2.1 OVERVIEW OBSERVATIONS

Analysis of a range of qualitative and quantitative data provided to the Review
paints a picture that has been very consistent. The current state of play appears
well summarised by the comment made by a submariner Lieutenant Commander
that appears on page i.

The issues that need to be addressed to stabilise, then grow and thereafter
manage the uniformed submarine workforce in a sustainable way, appear
evident. There is widespread agreement on the problems that have contributed
to the prevailing situation and what needs to be achieved to overcome them. The
voice of the submarine community, in particular, has been loud, clear and in harmony.

Submariners have been very willing to give their input and have been disarmingly open and frank in doing so. Action and outcomes must therefore be seen to be forthcoming quickly to avoid compounding the prevailing cynicism.

Many submariners said that they have been telling Navy’s senior leadership what the problems are for years. There is much survey data to support this statement. The problems seem not to have changed all that much but the immediacy of those problems certainly has. There is considerable similarity between the findings of this review and those from the last major examination of the problematic submarine personnel situation that was completed in 1995 by Captain W.A.G. Dovers CSC, RAN – ‘The Submarine Manpower Management Review’.

It is important to appreciate too that there have been several submarine workforce crises over the last 40 years but the corrective measures that have been implemented seem to have been unable to achieve an enduring impact.

**Key Observation**

To achieve and sustain a recovery of the submarine capability, corrective action is needed that targets considerably improved and sustained retention, consistently higher recruitment to the submarine force, both at entry level and laterally, at higher rank level from within Navy, together with measures that can assure prevention of this situation developing again.

It seems logical to address the prevention issues early because these are the issues requiring most urgent attention if a positive retention impact is to be achieved. A sustained positive impact on recruitment will rely in large part on successfully implementing measures to improve retention and prevent a relapse.

The current workforce situation is the result of a complex interaction of many issues; some outside Defence control but some that arise from sources over which Defence can exert some measure of influence. These issues emanate from the broader Defence organisation and the wider Navy, as well as from within the submarine force itself.

There is a range of solutions that could be applied to creating the effects needed to fix the problems. This report identifies the outcomes or effects that need to be achieved and where they exist, options for actions to create those outcomes or
effects. Some of the suggested actions will challenge established paradigms and cultures\(^1\), not only in the Submarine Group but more broadly, in Navy.

Changes to organisational structures and activity levels are warranted and the effects of those changes, if made, will potentially be significant. There are cultural issues in the submarine community that need to be addressed; these will be more challenging and require sustained effort over a long time to be successful. Left unchallenged, the current culture has consistently shown its resistance to change, with negative impact.

### Key Observation

If not addressed, the damaging cultural issues of the submarine community will most likely limit the benefits of organisational change.

Potentially compounding the seriousness of the current situation is an apparent and steady decline in experience levels since the Submarine Squadron relocated to Western Australia in the early nineties.

Experience levels are difficult to measure objectively and comparisons with the past are all but impossible. The proportions of the workforce on the various tiers of submarine service allowance may be an indicator but there is no historical data to allow comparison. It is common across Navy for people to say that the current generation is less experienced than they were at the same point – it is a trait of human nature. There is a view that the current submariners are far better trained than was the case in the Oberon days and they are far more professional; perhaps, however, the Oberon Class data is a benchmark of questionable value. There were bad practices in those days and people died as a consequence of some of them. Nevertheless, analysis of available data does appear to support the contention that experience among people at junior levels has fallen. This is discussed later.

The Review identifies several elements of the current situation that could be interpreted as warning signs of an ‘organisational accident’\(^2\). Many foreseeable

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\(^1\) The term culture, as used throughout this report, is used to refer to “the specific collection of values and norms that are shared by people and groups in an organisation and that control the way they interact with each other and with stakeholders outside the organisation” (The Australian Concise Oxford Dictionary).

\(^2\) ‘Organisational accident’ is a relatively contemporary term introduced by Dr James Reason. They are the comparatively rare but often catastrophic events that occur within complex modern technologies that have multiple causes involving many people operating at different levels. Importantly, Dr Reason argues that while unsafe acts by individuals are implicated in most organisational accidents, they are not a necessary condition. Unfortunately, Dr Reason does not offer much help in identifying lead indicators for organisational accidents except from his analyses of past events.
submarine accident scenarios would potentially have catastrophic consequences. For example, in early 2003 HMAS DECHAINEUX suffered a burst Trelleborg hose that compromised the boat's watertight integrity. That boat came within a frighteningly short time of being lost; estimates vary between nine and 60 seconds. The boat was saved from going to the bottom in water much deeper than the designed crush depth of the hull because key members of the ship's company responded well to the emergency.

Much has been done to mitigate the risk associated with a Trelleborg hose failure but there are other potential events that could be catastrophic if not handled well by the ship's company. The ability of a ship's company under such circumstances is a function of the nature of the incident, the quality of their individual and collective training and their collective experience. Aggregated with other issues of concern raised in this report, the declining experience level of the submarine community must be viewed with concern for the increased risk of an incident with a catastrophic outcome to which it contributes.

Under these circumstances, Navy would be wise to treat the incident in HMAS DECHAINEUX as its USS THresher and ensure that a strong and enduring focus is maintained on individual and collective training standards in the submarine force, combined with an approach to planning submarine activities that keeps the experience level of individual ship's companies uppermost in mind. The ambitions of the submarine community and the activities they plan to undertake must be adjusted accordingly.

Experience levels are a function of many things but declining experience can be accelerated when separation rates are high and people are in short supply. The largest proportionate and most serious of submariner shortages are currently in the junior ranks. Figure 1 (overleaf) shows the supply and demand situation across the junior ranks at October 2008. These people represent the future of the submarine capability and must necessarily be the focus of effort in rebuilding the capability from the ground up.

If the recommended actions proposed in this report are undertaken, the situation could well get worse in the near term as a significant source of the current problems is cultural in nature.

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3 USS THresher, SSN 593, was lost off Massachusetts in April 1963 during post-refit deep diving trials. The submarine sank in water some 8,400 feet (2560 m) deep, imploding and breaking into in six major sections. All 129 US Navy and civilian people onboard perished. This disaster was a watershed event for the US Navy, from which emerged their SUBSAFE Program on which the RAN's program of the same name is based.

4 The graphical data overleaf is somewhat simplistic because it does not show the significant shortfall of additional qualifications required by people in the POs or categories shown.
2.2 THE SUBMARINER CULTURE

The dominant culture of the submarine community is one that appears to be common among elite military forces. The description of the submariner culture given here is based on the observations of the Review officer and is his assessment alone. It must be borne in mind that there are many submariners whose behaviour does not conform to all of the elements listed. Nevertheless, the culture described is the one that dominates, at least partially, among the majority of the senior and most influential officers and sailors and many others as well.

The submarine culture is focussed intensely on the operational mission, to the point of near obsession, with the aim of achieving it at almost any cost. In the absence of an operational mission, the substitute focus becomes the submarine Fleet Activity Schedule (FAS). The culture is to plan ambitious FAS programs that are focussed on high-end operational activity. The essential task of generating submariners is subordinate to this objective, to the extent of it being almost inconsequential.

It is a culture with a powerful sense of its own professional mastery and invulnerability against others who operate in the maritime domain. Hence there are only two types of seagoing platform - submarines and targets. This leads to most submariners exuding an air of superiority and appearing to lack tolerance...
for non-submariners, let alone acceptance of them as potential professional peers.

A life of hardship well beyond most norms and in a wide variety of forms is accepted within the culture, as the way life should be; a badge of honour to be worn with pride by submariners. With this goes a high level of acceptance that fatigue is to be endured, rather than managed. In the absence of circumstantial hardship, submariners will impose hardship through management, rather than accept life being 'easy'.

In common with other elite forces, the submariner culture is an important element of operational success. However the behaviour that this culture engenders can be destructive and it is this sort of behaviour that is unquestionably a key contributor to the current workforce situation. Recommendations are made in this report that target this behaviour. There will be people who will oppose those changes. Resistance will most likely come from among the experienced, longer-serving submariners and they could likely leave as a consequence.

It is contended that if the cultural issues go unaddressed, through continued lack of attraction and poor retention of the people on whom both the current and future capabilities depend. Only the 'die hards' will remain.

Rebuilding the submarine capability will depend to some extent on lateral recruitment from within Navy, which history shows can quickly become effective contributors. Attracting these people will be very difficult even in the most advantageous of circumstances. It will be impossible, however, unless those people are convinced that the things about life in submarines that hitherto deferred them from joining really have changed. That is an essential prerequisite; further, the submarine community itself will have to welcome such people. There is some evidence to suggest that this may be an attitude that runs contrary to the existing culture of the community. Once efforts to attract in-service recruits start to become successful, the rest of the Navy will share the hurt. Navy must be prepared to accept that impact.

Significant and dramatic change is needed quickly for other reasons too. Minor adjustments around the fringes of the issues will be insufficient to convince Navy's junior submariners to stay. The many junior people who's trust in Navy seems to have been damaged and who's commitment is wavering as a result will see incremental change as more of the 'band aid' solutions they are accustomed to. Therein, they may consider that there is no point in staying on because Navy does not have the will to address the issues that are driving them out. It is fair to say that those sailors see the recent Navy Capability Allowance as an example of this 'band aid' approach.
Addressing the source of the problems will require money although there currently does not appear to be any pressing need to put more money directly into the pockets of submariners. The quantum of financial remuneration has not been among the most significant sources of expressed discontent for submariners, although there is unhappiness about some structural issues. That said, there is a small body of strong opinion, estimated at around 5% of the community, that the remuneration package for submariners is woefully inadequate by contemporary standards. Notably, even these people did not see a big pay rise as a panacea for current problems. Nonetheless, a necessary element of sustained recovery will be a commitment to maintaining appropriate remuneration.

made an interesting observation. He noted that the submarine community stood out as consistently being among the worst ‘belly-achers’ in the ADF. The reasons for that are probably not simple and perhaps there is some truth in the suggestion by some that submariners are a precious mob of prima donnas. The Review found little compelling evidence to support such a generalisation. On the other hand, it may be that they have legitimate issues to ‘belly-ache’ about. There is a body of evidence to support this thesis.

On the positive side, the passion most submariners have for their chosen craft and the pride they take in being a submariner remains very compelling. The happiest submariners were those who were part of a submarine ship’s company while the least happy were those experiencing the frustrations of not being able to get to sea in one. The future can certainly brighten if Navy can harness and nurture that passion along with the profound sense of professionalism that exists in the submarine community.

In deciding on actions to be taken, Navy must keep uppermost in mind that any future submarine capability edge will depend largely on how good the people are at their craft. Australia’s potential adversaries will increasingly be able to access technology that is every bit as capable as ours from France, Russia, Germany or Sweden. Getting the people issues sorted out now must therefore be given high priority.

2.3 THE EXTERNAL ENVIRONMENT

The positive economic circumstances in Western Australia have created a situation to which Navy seems not to have responded very productively, if at all. The payment of Navy Capability Allowance appears not to have made much difference although it is still relatively early days.

There is no doubt Navy has lost submariners because of the boom in Western Australia, directly or indirectly. Interestingly, the anecdotal evidence is quite
strong that with the possible exception of technical people, they have not been leaving to go into that sector because the work is more attractive. Rather, they appear to have been exercising choice in taking advantage of the opportunity a booming economy represents, for other reasons. This will be examined further in this report.

Other industries in the West are feeling similar effects, with separation of people going to the mining industry that are reportedly up to twice the rate for workforce in other states. Their experience appears to be that the attraction can be short-lived because the work and the life-style do not satisfy people for very long and that people do come back. Navy must be aware of this, stay in touch with ex-submariners, encourage them to return and make it easy and equitable for them to do so.

This set of circumstances appears important for another reason. A key element of the contemporary environment of life in Australia is choice. There is a greater and growing array of choice for people in almost all dimensions of life these days and for many people being constrained by a lack of choice is not attractive. Navy could do more in giving its people some choice in many aspects of life, to engender a greater sense of control over their lives.

The future of the boom may now be in some doubt because of the global financial crisis, making the forecasting of what could happen unwise. The lesson of the current situation is that in the contemporary employment market Navy cannot ignore the considerable potential for significant impact that local economic circumstances can have on the uniformed work force. There is a need for policies and management frameworks that enable agility of response.

**Key Observation**

Notwithstanding the prevailing financial uncertainty, the existing economic climate in Western Australia emphasises the need for prompt action to address the issues outlined in this report to stem the flow and attract people to submarines in the numbers required.
CHAPTER 3

PEOPLE (PART 1) – THE SUBMARINERS’ VIEWS

3.1 PREFACE

This section of the report examines the most important issues impacting on the sustainability of the submarine workforce from the viewpoint of the submariners themselves.

There is an important preface to make. There are few, if any new issues here. The submarine community has been highlighting these matters consistently and repeatedly in various forums over some years. Their frustration at being asked to tell it all again was palpable. So too was their widespread lack of faith that anything will happen out of this Review. This is hardly surprising.

Every bit as important is their hope that action might be taken at last.

3.2 RESPITE AND PREDICTABILITY

The biggest single issue that causes submariners to leave the profession is their consistent inability to get assured, predictable respite from sea service so that they can achieve a more normal balance in their lives. A common view was that being a submariner is to surrender control over your life. Submariners, especially junior ranking submariners, generally feel they cannot plan their lives in the short, medium or long terms.

A contextual discussion is useful here, before examining the detail.

3.2.1 Life at Sea is Tough

There is a sense from the submissions and comments of many of the younger submariners that Navy’s senior leadership has lost sight of how demanding the sea going profession of arms is. This is a judgement by one generation of another and is therefore based on comparison with the societal norms of the early 21st century. There is no doubt these norms are different from those of the third quarter of the 20th century, from which Navy’s senior leadership originates. By almost any comparison with contemporary Australian employment, life in the seagoing Navy is demanding. Few people in any other walk of life are asked to give up so much, so often and for so long as Navy people at sea. The fact that it can also be satisfying, rewarding and fun if managed properly and balanced against the other demands and opportunities that life presents does not alter this fundamental truth. It also places particular and unusual demands on people of the ‘networked X, Y and Millennium’ generations.
3.2.2 Life at Sea in Submarines is Very Tough

Life at sea in submarines is intrinsically tougher in every way. There are many reasons why this is so. There are aspects of Navy management that add extra layers of hardship for the submariner, when compared with the lot of the surface sailor. There are the obvious physical limitations imposed by the submarine, its size and severe lack of space. There is the almost total absence of privacy. There is the fact that modern submarines like the Collins Class are designed to be submerged most of the time at sea and are very uncomfortable when surfaced in other than the calmest conditions. There is the inability to maintain more than a very rudimentary and sporadic contact with family. In many important respects, particularly the latter, even Army’s Special Forces soldiers deployed on operations in Afghanistan enjoy more of the normal trappings of life than submariners.

The RAN is the only navy in the world that crosses oceans in conventional submarines as a matter of regular routine. This is significant. Conventional submarines spend a lot of time at periscope depth, which puts a great deal of strain on people and equipment. Whilst nuclear submarines also cross oceans they benefit from considerably more people on board to share the workloads.

Navy’s boats run in two watches at sea all the time. Work has commenced to design a three-watch system, for which a revised scheme of complement will be required. A prolonged exposure to working in two watches is far more fatiguing than the submarine community seems willing to understand. Furthermore, time off watch at sea provides very limited opportunity for respite in a dived submarine or on a long patrol or deployment as there are minimal or non-existent facilities for entertainment, exercise, privacy and so on. This situation is compounded by the fact that many people in a ship’s company are generally duty one in three even when the boat is alongside. Some, like CIS sailors, tend to remain one in two even when the boat is alongside away from home port.

The requirement to have people keeping duty for force protection purposes adds a great deal of extra pressure as that burden is again apportioned amongst only a small ship’s company. The sailors passionately hate keeping ‘up trots’ watch (standing watch on the casing in harbour), particularly at Diamantina Wharf in HMAS STIRLING. A remote monitoring system is available on that wharf but is either defective or apparently not regularly used for some other reasons for which a consistent, definitive explanation was not forthcoming\(^1\).

\(^1\) There may be several sensible reasons for this situation. Certainly a number of possible explanations that sounded reasonable were advanced, as were one or two that were petty and ridiculous. The question is, if there are sound reasons for doing something that so obviously generates unhappiness, why is it not explained to the people doing it? There is a leadership issue underlying this situation.
Thus, in the current submarine operating paradigm there is very little opportunity for the ship's company to get a decent rest even when the boat is alongside. This issue is compounded by other factors that are discussed later in this chapter.

3.2.3. Fatigue

There has been considerable research into submariner fatigue and its impacts by DSTO and others over the years that illustrate this issue well, the most current a DSTO report on Task NAV 07/74 from mid-2008. One study described the cognitive state of a submarine ship's company operating under the prevailing tempo of the day as very quickly reaching a point similar to having a blood alcohol level in excess of the legal limit for driving a motor vehicle. In spite of this, there seems to have been no great interest by the community at large in changing work practices to ameliorate and manage the risks associated with fatigue. This apparent lack of appreciation of the significance of fatigue and its impact on crew cognitive performance is one of several manifestations of what could be seen to be the skewed norms of behaviour that have developed over time in the submarine community. It could also indicate a benign acceptance of the status quo, something that became evident during interviews with more senior rank groups.

Reference was made several times during the Review to the similarity of submarine and aircraft operations – each high risk, low probability of failure activities with comparably severe consequences of failure. However, in aviation there is a relatively large number of immutable 'no go' criteria. Such protective criteria appear notably absent from the framework within which submarine operations are conducted. Unlike the aviation community where 'crew rest' is a strict doctrine, that term was not used once by a submariner during the Review.

Some of the stories are worrying. To quote one officer:

"I remember during one work up being on watch in the control room with people so exhausted we were all slurring like drunks. There were several deep draft ships around and I couldn't even see through the periscope properly I was so tired. It was very dangerous. Sea Training Group were onboard but they were all asleep."

And to quote from a report into stress and fatigue management in the submarine community:

"When a Commanding Officer collapses from extreme fatigue in the control room of their submarine or publicly shames personnel for falling asleep at their console, it sends a powerful message to the crew that fatigue is to be endured rather than managed."
That said, there are submariners who understand this crucial issue and manage their people well. Unfortunately the dominant culture is quite the opposite.

3.2.4 Psychological Concerns

There is much data from many sources that support the following observations. The Profile of Unit Leadership, Satisfaction and Effectiveness (PULSE) completed earlier this year provides an independent assessment and some very useful insights into the psychological well-being of the organisation, albeit with some important limitations. A summary analysis of the PULSE by staff of Navy Psychology West is at Annex A.

A measure of how quickly the situation is deteriorating comes from information supplied by Navy Psychology West. The number of people leaving the Squadron to discharge (all types), return to General Service or who are no longer fit for sea, is about the same in the first half of 2008 as it was for each of the two preceding full calendar years. In the same six month period, the number of submariners who have self referred or been referred by Divisional staff for psychological support to help with stress or anxiety has matched the highest number of these cases in either of the two previous years.

There are now three cases of submariners suffering posttraumatic stress disorder under intensive management, including in-patient treatment. For a force element group that has not been in combat, this should be viewed with serious concern.

The Reports of Return to Australia Psychological Screening (RTAPS) going back to 2004 also contain very illuminating observations on the mental health of the submarine force, as well as consistent recommendations for corrective action. These appear not to have been acted on.

3.2.5 There’s Not Much Fun Anymore

Submariners accept much of the inherent hardship willingly and with irrepressible good humour. For most, it is simply part of the life in submarines that they accepted when they chose that career path. There is however a clearly discernable undercurrent of opinion that there is no scope for any fun as a submariner anymore. The interesting overseas and Australian port visits and the time to enjoy them, the recreational activities that have long been a part of Navy’s seagoing life and those occasional very interesting diversions that submariners remember from the past but only other ADF men and women seem to be allowed to enjoy these days, are the sorts of things they wish for.
Comments about a lack of fun are quite common more widely in Navy too, generally from disgruntled middle ranking people. In the submarine community, these comments tended to come more from junior people who seem to have heard more about fun than experienced it. Coupled with this is an abundance of strong evidence that the submariners have been driven very hard in recent times.

The submariners’ generally very positive and productive attitude is commendable and must be nurtured. But there is another thread that is quite different and very disconcerting. There are some who seem not only to relish the hardships of submarine life but believe it should be harder than it is. This is the ‘I had it tough when I was in your shoes and it’s soft today so I’m going to make it my job to make life tougher for you’ type of approach and there appears to be a core of influential submariners with that attitude. There were several reports of a comment attributed to one very senior submarine officer along the lines that the high personnel loss rates were a good thing because soon only the core of real submarine enthusiasts would remain. This sort of attitude does appear to be most prevalent in an older demographic but with age comes rank and these people therefore have a level of influence disproportionate to their numbers.

The fact is that being a submariner is a hard life. The people who are asking for recognition from Navy are generally the ones who are powerless to bring about the sorts of changes they are hoping for. The relatively few who seem to be making it harder than it needs to be are in positions of power.

Why do the submariners not manage the capability in a way that provides adequate respite? The answer is complex but part of it lies in the submariners’ culture and proud professionalism, from which emanates the organisation’s emphasis.

3.2.6 Mission Focus

Submariners have a ‘can (and will) do’ attitude with an emphasis on achieving schedule. The more senior people in the submarine capability, particularly the senior management in recent times, have displayed an intense mission focus. Whether this has been a focus on getting a boat to achieve an operational mission or simply to achieve the Fleet Activity Schedule (most of which is, in reality, relatively discretionary), it is a focus that is so intense and so unrelenting as to push consideration of individuals well into the background.
In the apparent absence of any explicit statement of guidance to the whole community on what ‘big picture’ goal they need to be all working towards achieving, the schedule, or the mission if one is scheduled, is the thing that every one associated with the submarine capability will fall in behind. The submarine community as an entity has reached the point that it will do whatever is necessary to achieve the mission, even to the destruction of people and the capability itself. As one senior person commented, every time there is an operational mission scheduled, they will turn themselves inside out, gut the organisation if necessary, rather than fail to achieve the mission.

Many, many stories from sailors not only confirmed the veracity of this statement but made it clear that it is an attitude that extends with almost equal intensity to routine activities over which the submariners themselves exercise ultimate authority and control. This culture was observed at work first hand, in behaviour that demonstrated a deeply entrenched culture in which consideration of any individual’s circumstances is minimal at best and more commonly, totally absent.

There was some balancing evidence of people whose default setting is very clearly to give serious and appropriate consideration to individuals; however, this is not the culture of the organisation at large. The dominant culture seems to be that hardship above and beyond what others experience is to be expected as the norm. Those who do not accept that culture do not last long. One independent but very-well informed and well-placed source suggested that the Squadron’s tolerance of people with compassionate problems that cause them to suffer limited availability has a finite limit. Once that limit is passed, the person will be likely to be given a ‘punishment posting’.

The positive aspect of this situation, if there is one in today's circumstances, is that a submarine ship's company can generally be relied upon to give truly herculean effort to achieving the outcome in the face of extraordinary challenges. The culture bias today, however, is too far towards the operational mission, or the schedule in the absence of an operational mission, and is undoubtedly hastening the decline in the submarine capability.
3.2.7 Respite and Conditions of Service

There are many elements of Navy life, management and conditions of service that add overlays of hardship to the already tough life of a submariner. Comments here are restricted to some aspects that impact respite. A wider discussion of issues relating to non-financial conditions of service appears in Chapter 6, 'Organisation'.

The standard of accommodation provided to submariners when they are alongside in other than their home port is a significant source of dissatisfaction. In the Oberon days, ship's companies stayed in reasonable quality hotels and were paid subsistence allowance when the boat was alongside away from home port. This was apparently not strictly in accordance with the governing regulations but the practice became established and was condoned over a very long period. A large proportion of current submariners served in Oberons and they remember the days of hotel accommodation as a standard condition of service.

In recent years with money tight, a rules-based approach to this issue has been adopted, requiring submarine ship's companies to live ashore in Service accommodation, if it is available. Unfortunately, in applying this quite reasonable policy, too often the accommodation supplied has been substandard by any measure. There are many anecdotes to support this statement and the impact has obvious and corrosive impact. Not only does inadequate or inappropriate shore accommodation impact on people getting a decent and comfortable break from uniquely arduous service at sea, all too often it actually adds more deprivation to their lives because of such factors as limited availability of recreational facilities, the distance from centres of entertainment and abnormally restrictive rules of occupancy. Quite clearly this is an issue that is combining with other sources of deepening, longer-term dissatisfaction among submariners with their lot in life. It is an issue that damages their belief that their Navy cares.

3.2.8 Predictability

It is clear that one of the most significant issues causing dissatisfaction among submariners is the high level of program unpredictability involved with service in submarines. This makes planning their lives a pursuit that falls somewhere between challengingly difficult and impossible. It is an issue with a number of causal threads that can interact to compound the pain that eventually (and sometimes very quickly) drives people out. Everyone wants to be able to feel they can have some certainty about planning for the many dimensions of life in which Navy should play no part. Certainty is one reason for submariners joining the mining industry. While the pay is attractive, the Defence package is still competitive; however, in many cases the work, as identified earlier, can be less attractive. Life in submarines is not even in the hunt when it comes to giving people certainty in their lives. The submariners' behaviour in response then corresponds with Maslow's theory of the 'hierarchy of needs' at work.
The Fleet Commander has published rules to protect people from being called on too often to be an op relief. This is a worthy initiative and certainly a step in the right direction in terms of providing people with a degree of certainty. Nevertheless, publishing rules is to be managing the problem, not fixing it. Although well intended, the rules are focussed on achieving schedule outcomes as the priority and in today’s circumstances are not all that helpful for the individual. The maximum protection an individual can get from being called on to be an op relief is currently three months. Many normal aspects of life cannot be planned, executed or enjoyed in a three-month window. Of concern, little evidence came to light to suggest that the rules are enforced or monitored but there was evidence to suggest the contrary. So the ‘can do’ culture is apparently more dominant in Navy today than obedience.

Submarine programs are subject to frequent change for many reasons. This is one area in which unrealistic expectations, mission focus, a ‘can do’ attitude and a strong desire to be seen to be flexible can all be seen at work. Those people who write the submarine schedules appear to produce ambitious plans that make limited allowance for things to go wrong. This may be a somewhat unfair analysis that is not always applicable but on balance, and certainly in the minds of those who have to achieve the schedules, it is more often true than not. When things come adrift with the program, as they regularly and frequently do for a myriad of reasons, the submariners’ mission focus and op relief machinery swing into action and the objective of keeping to schedule takes primacy, too often regardless of cost in people terms. If the problem is a platform defect, maintainers will be required to do more work under increased pressure to achieve the schedule, thereby impacting their respite. If the problem relates to people, op reliefs will be sourced from other boats (in respite) or those ashore in respite postings.

To quote one senior submarine officer:

"Part of this problem is a lack of backup – if a frigate falls out of an activity due to defects etc there is generally another that can take its place, or at least it is one of two or three committed to that activity. With (submarines) running this almost never happens. There is no backup plan so the allocated SM is flogged to keep to its commitments."

This is an issue that needs to be examined with balance and wisdom. Very often submariners will happily work excessive hours to achieve a schedule towards which they are personally very motivated. But there is a limit to how much and how often this sort of thing will be a primary motivator for an individual.

The scheduling problems start right from the beginning of the planning cycle.

The submarine FEG planners seem to have reached a refined and reasonable model for deciding when to send ship’s company to South Australia to stand by a boat, in order to minimise absences from family.
This good management on their part comes undone when ASC 'comes clean' on major schedule delays at the last minute.

In summary, submariners want reasonable levels of assured respite and much better predictability in planning their lives. Contemporary management theory shows that the approach to administration of these issues is a key part of the hygiene factor that is the biggest statistical source of dissatisfaction in employment. The substantial dissatisfaction among submariners with this aspect of Navy administration is completely predictable according to the theory.

**Key Observation**

Navy must give submariners a strong commitment to allowing respite and providing much better predictability, then deliver on that commitment reliably, consistently and in a sustained manner. Changes are needed urgently to the way in which the submarine capability is managed to deliver this outcome.

### 3.3 GEOGRAPHIC STABILITY

Surveys of several types across the ADF in recent years have consistently cited geographic instability as a strong source of dissatisfaction leading to discharge. The submariners’ data are no different and there are several things that could be done to better support submariners on this issue. One such area is in respect of CIS SM sailors. This issue is discussed in Chapter 9, 'Facilities'.

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2 Frederick Herzberg, “One more time: How do you motivate employees?”, Harvard Business Review, January 1968. Herzberg is a noted psychologist who has become one of the most influential names in business management. This article had sold 1.2 million reprints by 1987 and was the most requested article from the Harvard Business Review.
3.4 THE WORK, WORK LOADS AND JOB SATISFACTION

3.4.1 Officers

If the life of a submariner is tough then by comparison, the life of a submarine officer is very tough. Even the sailors agree that officers in submarines are over-worked. Not only are they in two watches all the time at sea but they seem to have the same load of ancillary administrative duties as that carried in a frigate, which enjoys the benefit of three times as many officers with a generally smaller watch keeping load. There is widespread agreement among officers and sailors that the average work day for an officer at sea is around 18 hours and can be as high as 22 hours in periods of high activity.

The apparently total absence of the notion of managing fatigue, or the 'crew duty/rest' cycle, is alarming in the light of these circumstances. There is much evidence that this load on the officers, combined with the intense mission focus culture, leads to deep and compounding fatigue. The absence of proper, predictable and assured respite from sea service adds to the effect and results in, amongst other things, extremes of behaviour. There is a significant body of evidence to support this contention.

Shortages of key people can only exacerbate this effect, adding to individual burdens as work is redistributed among those remaining. For example, the Collins Class scheme of complement requires two watch leaders, however, suitably qualified officers are in very short supply. Most boats routinely have only one. In such cases the XO normally becomes the second watch leader, with the result that the duties of this key member of the command team are either dispersed among the Captain and others, some of whom are less well-prepared, or neglected.

3.4.2 Sailors

Technical sailors are generally very frustrated by not being allowed to do the work they are trained for and joined to undertake. Knowing how to fix things but not being allowed to because a contractor has to do it, rubs salt into their wounds. Postings ashore to the Fleet Support Unit exacerbate this problem because there is very little for them to do there. Shore respite that is boring because it does not gainfully employ them and provide opportunities to develop their skills is counter-productive and fuels dissatisfaction with Navy life. In general, there was a very strong impression that the younger technical people are especially keen to be challenged and developed but find this frustratingly hard to achieve as things currently are. This, combined with the high national demand for skilled technical people, has led to a number of separations.

3.4.3 Specialist Support

The broader workload situation for officers and sailors is made more demanding by the fact that submarines do not have some important specialist skills onboard or even available for help on-call to perform a range of
important ancillary functions. These functions can appear simple, such as stores accounting and cash management, but can involve a large amount of work and responsibility. In the surface Fleet, trained specialists in that field who are part of the ship's company handle them. In the submarine ship's company they are delegated to people who are neither suitably trained nor interested in doing them. It is not what they joined for, so they become enthusiastic amateurs at best, reluctant and disgruntled 'pressed men' at worst. The ramifications when some of these jobs are not done properly are potentially serious.

For example, in respect of stores accounting, a submarine typically carries a spares inventory valued between $6m and $10m. If managed by amateurs, most agree it will be unlikely to be managed adequately, despite the best efforts of the people trying to do so. There is no organic IT system to support the function, which severely limits asset visibility and negates the best of efforts at good and responsible stock management. To quote one Petty Officer:

"the local video shop has a better handle on its stock than we do in submarines."

Many studies and surveys have identified the fact that people become very de-motivated when they find themselves spending more time doing ancillary tasks than they spend on their chosen specialist trade or craft. So the fact that the recent surface combatant due diligence analysis identified that technical sailors in frigates spend at least 50% of their time on whole-of-ship duties should be viewed with concern for submariners, for whom the situation is endemic and likely much worse. On this issue, the lack of utility of considering submarines as Major Fleet Unit (MFU) is evident. Supporting them as if they were Minor War Vessel (MWV) may facilitate better management outcomes. This issue is discussed in Chapter 6, 'Organisation'.

3.4.4 Technical Sailors

Lack of job satisfaction came across as being by far the biggest source of dissatisfaction for junior technical submarine sailors. The pervasive tales were of spending time sitting around 'twiddling their thumbs' or performing menial tasks such as fire sentries and tank cleans for contractors. Leading Seamen do not have the competencies required to enable them to sign off Task Book objectives for Able Seamen so they feel constrained from getting involved productively in training.

Another commonplace claim was frustration over work being given to contractors that the sailors have the qualifications to do. There was deep and widespread frustration among the technical submariners at being required to 'baby-sit' contractors doing work they are trained and qualified for. Sailors posted to the Fleet Support Unit (FSU) claim to be no better off because even here they have to fight for work. One sailor claimed that in an eight-month
period he performed only one task within his specialist professional field, a job he had to fight to get that took him two hours to complete.

3.4.5 Divisional System

There is much evidence to indicate that the Divisional System is under a great deal of stress in the submarine community as a consequence of all of these issues. As a result, the sailors infrequently enjoy the benefits of being cared for in the manner Navy has long decreed as proper.

**Key Observation**
The submarine crewing model needs to be re-thought to lift a large burden of work from the submarine ship's company and put in place significant additional external support for the boats, as well as providing much better career development opportunities.

3.5 CAREER MANAGEMENT DISSATISFACTION

The many individual tales of unhappiness over career management are extraordinary. Most appear to constitute quite reasonable grounds for dissatisfaction. Admittedly the evidence may appear one sided but the degree to which people are disgruntled with how Navy treats them in this domain is so plainly evident that it must not be ignored.

The key issues causing discontent comprise:

- 'one size fits all' structures and policies that are applied with an inflexible, rules based approach, on one hand, and on the other;

- widespread inconsistency in how people are treated and what the system will do for individuals;

- a widespread lack of willingness (or perhaps inability) to take into consideration an individual's personal circumstances;

- a chronic focus on addressing short term organisational issues with solutions that cause long term damage;

- poor understanding in the career management agencies, especially DNOP, of submariner career development needs;

- strict minimum time in rank requirements, which run counter to the modern philosophy of progress based on merit, and

- bad manners in dealing with people, epitomised by rudeness, suspicion and ignorance.
These comments encapsulate the most common complaints from submariners, sailors predominantly with a small number of officers. Criticism of people in the career management agencies should be viewed with some caution because important elements in successful individual career management is a Divisional System that is working satisfactorily and good local leadership. These are both areas where problems appear to exist in the submarine community.

There is substantial evidence that the submariners have been responding to the personnel shortages by pulling people through the various developmental jobs far too quickly. This not only fuels the inexperience issue but adds substantial stress to individuals, a noteworthy number of whom have reported feeling that they are simply not ready for the jobs they are being expected to do. This can conspire with the impacts of fatigue from insufficient and ineffective respite. Add extreme behaviour, poor leadership practice or both and the effects can be (and in several cases have been) severely damaged people.

In past years the management of submarine officer careers has attracted intervention from Navy’s senior leadership several times and appears to be a vexed issue. The submariners have been legitimately criticised in the past for their handling of officers careers but the evidence from the officers themselves suggests that the established Navy system is not serving them well either. Part of the problem is a lack of understanding of submariner issues within DNOP where there are routinely no submariners on staff. Attempts to address this in the past by posting a submariner to DNOP to provide that understanding and encourage better liaison have not been sustainable because of the shortage of suitable officers to appoint.

The key point to note is the fundamental importance of this issue to a sustainable workforce and the intensity of the frustration and irritation that surrounds it at the moment.

<table>
<thead>
<tr>
<th>Key Observation</th>
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<td>There seems to be a need to consider a different model for managing submariner careers broadly and officers’ careers particularly.</td>
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3.6 RECOGNITION AND REWARD

There is a view held by a significant body of submariners that the Navy does not consider the submarine force as a key strategic Defence capability and therefore does not support it properly in an organisational way. The term 'unaffordable hobby' seems to fit the attitude they see being displayed. This is a source of frustration, especially for those whose views of the World have not been shaped by experiences outside the submarine community in a way that enables them to enable a better understanding of Navy’s full role and current personnel situation.
There is no doubt that Navy people in Western Australia generally feel very isolated from the Navy. There seems to be little apparent recognition in any real sense of just how difficult and how much more expensive in time and money it is to participate fully as part of the Navy when based in the West. There are some important side effects. For example the voice of the submarine community is almost absent from many of the important and influential discussions that take place in the East, especially Canberra (such as Category Advisory Group meetings, for example).

The strong sense is that the submarine community was pushed away from the Navy when it was moved to Western Australia. One indicator of this is senior officer visits, which make a bigger difference than might be thought. To quote one officer:

"(HMA Submarine X) (did) 2 x deployments over . . . sea, executing two nearly flawless operations, crew members carried out several acts of bravery under extreme circumstances with the end result being NOTHING, not even a SMFEG commendation let alone support from the FEG for higher awards. COMAUSFLT or CN never once (met) the returning crew over the period ….. let alone a band. We came home quietly and discreetly (as we should although it was on the whole front page of Navy News) and we were unable to fund our own reception (tea/coffee or shelter for our wives and children who had put up with days (away) from home) due to our small ships fund and the (exorbitant) costs……explain to the crew why the 2 and 3 stars or above were 'busy' and seemingly and very visibly no one cared."

Independently of this submission, there is strong evidence to suggest that a bravery award was probably warranted for an act in one of the deployments referred to but no action was apparently taken. There is a deal of bitterness about that but not on the part of the person whose actions deserve recognition.

There is quite a sense of frustration about the perceived lack of formal recognition that individual submariners attract — commendations of all types and formal honours and awards. This can be a fairly simple issue to address but seems not to have been dealt with effectively within the submarine community. It demands effort on the part of submariners themselves and leadership in managing it, including the provision of feedback to people who have gone to the effort to put proposals forward. There is evidence to suggest that this is not happening as a matter of course. It is interesting to note that no mention was made of the fact that submarines have won the Gloucester Cup several times in recent years, which suggests perhaps that being judged as the best is unremarkable for the community, or not very important.

There is a strong sense that the extra things submariners are required to do are generally not properly recognised, recompensed or rewarded. There are cases where submariners are required to gain additional skills-based qualifications that attract a substantial additional responsibility for no
additional recompense of any sort. The Petty Officer of the Watch qualification is one example but there are others. A more detailed examination of this aspect of being a submariner is warranted.

An issue raised by several submarine engineer officers relates to charge qualifications. The perception is that submarine charge qualified engineers are not considered to be fully qualified by the Navy engineering fraternity unless and until they have completed a charge job in a surface ship. Not surprisingly, enquiries revealed this to be a somewhat more complex issue with dimensions that appear not to have been explained satisfactorily to submariners. In essence though, it seems to be one of many examples where the submarine community does not enjoy sufficiently close engagement at a professional level with the rest of the Navy, as a consequence of several contributory factors mentioned throughout this report.

3.7 WESTERN AUSTRALIA

There is a widespread belief that the submarine capability has not recovered from the loss of people that resulted from moving the force to Western Australian from Sydney in the early 1990s. There should not be any surprise in a country where most of the population is in the East that basing the force in the West is an impediment to effective recruiting. There were many and varied submissions on this issue, some from submariners but many from in-service people who said they would happily apply to become submariners but do not apply because they do not want to live in the West. An apparently worthwhile number of internal recruits are lost as a consequence.

Western Australia has become an expensive place to live. The days of the savvy junior sailor being able to buy several houses there in the course of two or three postings are long gone and this situation, forecast to worsen and continue into the medium term future, is a real disincentive for people going there from the East.

Key Observation

New frameworks that might be possible under existing policies and possible policy changes covering employment in submarines that mitigate the issues associated with the force being based in Western Australia need to be developed.

Repatriating part of the force to the East to address this problem would impose substantial additional maintenance costs and is unlikely to be viable in any case with the existing force under the current arrangements. The workforce is too fragile and too few submarines are being generated for such a move to give much promise of being successful. To do so may further dislocate the already fragmented effort to generate the submarine capability. There are other approaches that could have a better chance of utilising in-
service recruits from the East without embarking on the expense and disruption of splitting the current force between coasts.

3.8 SMALL PROBLEMS WITH BIG CONSEQUENCES

There were many complaints from submariners about a range of what might be considered trivial issues. Some would say they would not be real sailors if they were not complaining about something but there was a quality of despair about some of this. Trivial or not in the larger scheme of things, these were sources of added hardship, frustration with 'the system' and irritation at the fact that such simple things do not attract proper management attention. They had a larger than reasonable impact because they seemed also to be intractable. In a generally healthy climate they would not amount to much but added to the more serious issues mentioned in this Chapter, they tended to become those 'straws that break the camel's back because they added substantially to peoples' sense of not being valued.

One frequently quoted example was of the dishwasher in HMAS COLLINS that was unserviceable, being apparently unrepairable (obsolete perhaps), for a year. Sailors reportedly had to do the washing up in a bucket during that time. A small irritant perhaps but added to the issues of fatigue, respite and cramped quarters, it quickly became a focus of very intense annoyance directed at Navy management.

In another example, purpose built submarine shore power facilities at Fleet Base East (FBE) have apparently been unserviceable for some months, creating a big impact on the ship's company of visiting boats achieving respite. Several other services at FBE are apparently suboptimal for visiting submarines as well, creating overall a situation wherein the boats either avoid visiting Sydney or minimise the duration of their stay when they do. Consequently, opportunities are lost to tap into what is possibly the largest source of potential in-service recruits for submarines.

3.8.1 Collins Class Local Area Network (CCLAN)

The CCLAN is another example of an issue creating angst with a multidimensional impact. While the rest of the Fleet has moved steadily into modern communications architectures, this project has remained on the books for about a decade without realising a capability. Latest advice, as of 29 October 2008, is that the project has been shelved and the project team disbanded. Cost has been the major contributing factor but there are other issues too and this project is one of many pointers to problems in the relationship... compounded with organisational complexity, where Navy suffers the ultimate impact.

This minor capital project was often cited as an example of how low on the priority list submariners well being sits. Its cancellation will confirm that view in the minds of many. The CCLAN is not so much about administrative
convenience or efficient operational information flows, as important as those considerations are. It has a great deal to do with comprehending how important it is to the younger generations when they are disconnected completely from their networks. E-mail is a commonplace part of life today. It takes a very short space of time to understand the importance of e-mail when a ship’s e-mail connectivity is unexpectedly disrupted. As the submariners are quick to point out too, almost alone in Navy today, the submariners have not attracted sufficient priority to be being given access to e-mail.

Information systems technology (IT) is among the fastest developing of all technologies and it is an attractive vocation for young people. For the people Navy recruits these days it is all about IT, not radios. In Navy, Local Area Networks (LAN) are administered by CIS sailors who are attracted to work in IT. When confronted with a choice of the surface fleet with it, or submarines without it, naturally enough the submarines appear less attractive. As one CIS SM sailor ventured, the Collins Class are seen as being in the dark ages by the IT aspirants that Navy recruits.

| Recommendation 1 |
| "Collins Class LAN" |
| The CCLAN project should be re-energised and properly funded as a matter of priority, in order to achieve installation as rapidly as possible. |

When eventually achieved, there will be a requirement for it to be managed. This would normally be a task for a PO CIS. The current Collins Class Scheme of Complement (SOC) and the way in which CIS sailors are employed will not support the proper administration and management of a system that will quickly become a key component of the submarine’s overall capability. Changes will be required.

### 3.8.2 Women in Submarines

On casual examination there would not appear to be any major issues with the employment of women in submarines but this may not reflect the true situation. There is a strong sense that mixed messing trials have been successful and the way forward is clear. But these trials have been successful, in part at least, because the people involved have wanted them to be successful. Furthermore, the largest component of the submarine ship’s company does not mixed mess – the junior sailors. They ask why this is so, when it seems to work for others. To the extent that not allowing it for the junior sailors could impede the progress of their careers, they would seem to have a potential case for claiming gender discrimination.

More mature and experienced female submariners have commented that the junior sailors generally will never be ready for mixed messing.
This issue needs to be resolved. There is a possibility that Navy may be contravening the Sex Discrimination Act in managing women in submarines the way it does today. In 2003/4, when mixed messing trials were first being suggested, informal advice on this subject was sought from Ms Pru Goward, then the Sex Discrimination Commissioner. She advised that Navy could seek an exemption from some parts of the Act if it could demonstrate that compliance in the case of submarines was not possible (not 'inconvenient' or 'undesirable' or 'expensive'). No convincing evidence could be found that this issue has been followed through to conclusion in Navy.

Although a difficult issue on which to get a definitive understanding due to a lack of real evidence, there were several isolated comments from females during individual interviews that some male submariners hate having women onboard and deliberately make life hard for them. This attitude is disappointing but not surprising and almost certainly still exists elsewhere in Navy but there was no suggestion that it was more than isolated. When seen in the context of all the other issues relating to people however, this is something to keep in mind and may be worth looking into specifically in the context of the submariner culture.

3.9 BALANCING COMMENTS

This section has necessarily focussed mostly on the negatives but it is the picture as seen through the submariners' eyes. Right or wrong, these are the perceptions upon which they act.

Like anything in life, the real situation has many shades of gray. There is much that is not good by any measure but there are some fine examples of excellent practice in most of the issues discussed. There is also plenty of other very good practice on issues that have not been mentioned.

The point is that the bad seems to have been overwhelming the good for a long time, which is arguably the main reason behind the current state of affairs. With strong and properly focussed leadership these things can be turned around but if a recovery achieved in this way is to be sustained, not only must the culture be changed but there must also be structures in place that will prevent relapse. The submariners will also need the wholehearted support of the whole Navy.
CHAPTER 4

PEOPLE (PART 2) ~ OTHER OBSERVATIONS

4.1 PREFACE

This section of the report examines issues relating to the people FIC which need to be addressed. Some, like submariner experience levels and the section on technical personnel, are of great importance. Others may not have a major impact on a sustainable workforce but they are important to some degree if that objective is to be achieved.

4.2 EXPERIENCE LEVELS

There is empirical and qualitative data that shows the level of experience of junior submariners has been in decline for some time. There are pockets where this would seem to be very serious, while others areas are less severely impacted. The data are not definitive and care must be taken interpreting them because experience is not simply a function of time but depends on a range of factors such as 'quality' of sea time as well as the quantity. The data is not helpful on that score.

Nevertheless, the very widely held view among the community itself is that experience levels have fallen. In the context of much other information about what has been happening elsewhere in the community over the years, this intuitive assessment appears more likely to be accurate than not.

Some argued that even if true, it does not matter because the standards demanded of individual seagoing submariners and ship's companies have not dropped. Others scoffed at that view as being laughable. As one senior sailor said:

"That may be true in one or two places but in my view the bar has been lowered so far in the last few years that my four year old son couldn't get under it.

Those with long experience have commented that the training provided today is much better than it was 20 years ago. While quality training is an important element in generating a safe and professional capability, it cannot become a substitute for experience.
The data shown at Figure 2 can be interpreted as illustrative of a decline in experience over time in respect of one key middle-ranking officer group, the Submarine Warfare Officers. The graph shows the time between award of 'dolphins' and completion of Submarine Warfare Officer Course (SMWOC). The black line shows the trend. This period has dropped from four years to approximately one and a half years in the period shown. This is probably a product of several factors – better training (perhaps), pulling people through the career continuum much more quickly than in the past because of the shortages (almost certainly) and there are possibly some other factors. There is a point at which these data cannot be seen to be indicating a continual improvement in efficiency of the system producing these officers (as one submariner suggested) and must be seen to be indicating a decline in experience levels of these key members of the command team.

![Graph showing time from award of 'dolphins' to completion of SMWOC](image)

*Figure 2. Time from award of 'dolphins' to completion of SMWOC Course (TA-SM)*

When this data was shown to groups of senior sailors during the group meeting phase of the Review, they generally agreed, without demur, with the proposition that it did show a serious drop in experience. Several voiced the opinion that in all likelihood this picture was far from being the worst indicator of declining experience.

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1 The award of the 'Dolphins' broche signifies completion of the *ab initio* training program, the Submarine Sea Qualification or SMSQ, required to become a submariner.
This is an important issue for a sustainable workforce for two reasons. First, there is clear evidence that some experienced submariners are concerned for their own safety by the decline in experience. This appears to be having some impact on retention although it has not been measured. Notably, those people are sufficiently experienced that their opinions are listened to by others.

Secondly, if experience is declining in conjunction with other risk factors becoming more serious (as is the case), the risk of an organizational accident must increase.

Another comment made many times was that Submariner Sea Qualification (SMSQ) boards being conducted today are half as comprehensive as they were even two years ago, as the current training system does everything it can to pull trainees through as quickly as possible.

There were quite a few people who expressed the view that because of the shortages of people and the strong mission focus, they were pulled through the post-training continuum far too fast and were not getting sufficient opportunity to consolidate, let alone achieve some respite.

A further indication of the decline in the depth of organisational experience over time can be seen in the numbers of people who are required to hold extra qualifications for several positions in submarines. One such case is the Petty Officer of the Watch (POOW). The established requirement is that a ship’s company have four POs qualified for this role when the submarine is dived, at least two of whom are also qualified to act as POOW when the submarine is surfaced. On commissioning in 1996, HMAS COLLINS had five qualified POOWs with between one and five years experience. In 1998 HMAS FARNCOMB commissioned with six but they had an average of one year of experience.
The fact that the 'rules' on this issue were 'adjusted' quite dramatically is a noteworthy issue in itself. Earlier comments in Section 3.2.3, 'Fatigue' are germane.

In some apparent contrast to the data above for SMWO, more senior submariners show a different trend. Data for the time between award of dolphins and completion of XO course, and from dolphins to completion of Command Course, both show an upward trending median line that could suggest experience levels are actually increasing slightly over time. This could also be a reflection of lower submarine availability. The data are open to wide interpretation.

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<th>Key Observation</th>
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<tr>
<td>Many factors have probably contributed over time to a steady decline in junior submariner experience levels, which must be addressed.</td>
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4.3 RECRUITING

Analysis of the large amount of data available on recruiting to the submarine capability shows that the recruiting outcomes are not meeting the needs of a sustainable submarine workforce. There are many possible reasons.

There appears to have been a view at the strategic level of Navy that the recruiting function belongs to Defence Force Recruiting (DFR). Few senior people would agree to that notion and the accepted philosophy appears to be that everyone has a role in recruiting; however, the evidence gathered suggests that is not how the Navy actually behaves. Navy has been largely a silent strategic player in the relationship with DMO and ASC (as discussed in Chapter 8, 'Support'); similarly Navy appears to have had a less than effective voice in the recruiting function³.

Navy needs to work more closely with DFR to ensure it gets the outcomes it needs. There is much within DFR's bailiwick that can and must be improved. Tales are frequent and apocryphal about how long the recruitment process takes, how repetitive, unprofessional and inefficient it is, how many inaccuracies, if not falsehoods people encounter in the information they are given by recruiters, how

³ There seems to be both a cultural and capacity dimension to this issue. The final section of this report will examine this issue further. The observation that will suffice at this point is that the command and control culture within which Navy officers are inculcated from the earliest days seems not to be adapting effectively to the way outcomes must be achieved in the complex matrix organisation of Defence today. The disaggregation of ownership, responsibility and accountability among many parts of the matrix creates management challenges for senior leaders that Navy seems not to have adapted to as well as it must.
regularly people have completely incorrect assumptions about Service life that go uncorrected. The new Director General DFR is well aware of the challenges he faces but he also shows a strong willingness to help as much as possible, including to the extent of ceding some of his control to Navy where it may make sense to do so. Navy must exploit this opportunity.

Navy also seems not to comprehend that for DFR, Navy’s submariner problems constitute only a fraction of their overall business at a time when DFR are charged with growing the Army and addressing a large array of other critical trade issues. This is not the time for Navy to be leaving it all to DFR and hoping for a good outcome. At the very least Navy needs to be willing to make submariners available to DFR in significant (although not all that large) numbers to assist with their efforts. A useful way to do this would be to ‘attach’ virtually a qualified submariner to every person who makes an application to join the Navy with intent to become a submariner.

Successful recruiting from within Navy is, and will continue to be essential to a sustainable submarine workforce. Success depends entirely on Navy’s own efforts; DFR is not active in that space. The evidence is quite clear that there has been little success from Navy’s own endeavours because they have been fragmented, sporadic, poorly supported, under-resourced and largely left to the submariners to do for themselves.

As identified previously, rebuilding and sustaining the submarine capability will depend to some extent on lateral recruitment from within Navy. Attracting these people will be very difficult and will require a concerted recruiting effort on Navy’s part. If the current personnel crisis is to be avoided in future, prevention in the form of an embedded, permanent organisational approach to internal recruiting will be necessary.

The submariners have done as much as their funding and other resources permit but they have not been able to be as successful as necessary. Given the vital importance of lateral, in-service recruitment to solving the problem, they need Navy’s full support.

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<tr>
<td>Navy must become much more active and aggressive in recruiting submariners, especially from among in-service people, if a sustainable submarine workforce is to be achieved. A coordinated, whole of Navy approach and campaign is called for, which must involve submariners but which must not be left to them alone. It must be sustained permanently as part of Navy’s ‘business as usual’.</td>
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A more aggressive approach to recruiting should be adopted, similar to that undertaken routinely by Army and RAAF and even the DMO. There is no
shortage of active recruiting campaigns by them in the Joint arena, via Service newspapers and other vehicles and there is no reason for Navy not to behave similarly. Special Forces barrier testing is a case in point.

As with the Special Forces, fostering the notion of submarines as an elite force would be likely to provide a fillip to in-service recruiting. It is worth noting that of the small number of submariners interviewed who originally came from another Service, most said that for them a sense of the elitism of submarine service was part of the original attraction.

Other things can help too, as history shows. The defunct ‘Cuttlefish’ program where potential submariners were given an opportunity to ‘try before buying’ was widely reported as having been a very successful activity. The Submarine Presentation Team approach has also been successful to varying degree over many years.

Having a system or program that gives people an ‘obligation free’ opportunity look at a career in submarines first hand, at sea if space permits, is potentially powerful and could be better exploited than it is today. The enhanced selection process (ESP) is a development of that idea but it seems to be having constrained success because people in General Service find it difficult to complete the prerequisites and obtain release from their own ship or unit to attend. No doubt this is partially a result of the wider Navy personnel shortages. As good as the idea of ESP is, it needs wider Navy’s support if it is to be fully effective.

The submarine community has recently decided to schedule ESP immediately preceding the Introduction to the Collins Class Course (ICCC), for reasons of financial efficiency. This might not be wise. The value of ‘try before buying’ should not be underestimated, especially when the prevailing view among General Service sailors appears to be that once embarked upon, a career in submarines is almost impossible to get out of without discharging. Some form of escape clause seems to be a very important and necessary element of attracting more recruits. In the context of an elite force, one that is relatively harder to get into than be rejected from, this makes sense.

Some other approaches are worth considering. The submarine community proved to be a remarkably fertile source of ideas. Suggestions included:

- Establishing a dedicated submarine recruiting shop front at HMAS CERBERUS and in Sydney (FBE or HMAS WATSON perhaps) for people interested in a submarine career to go to for information.

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4 Implementation of the Government’s ‘efficiency dividend’ savings has resulted in some damaging outcomes. For example, all funding being removed from the SPT and ESP, which creates inefficiency and is one of many indicators that could be seen to suggest that Navy is under-funded for what it is trying to achieve. This is discussed in Chapter 11, ‘Supplies’.
• Giving the top ten graduates from NEOC and Recruit School a tailored, obligation free exposure to submarines for a week. This would need to be very carefully orchestrated and managed so as to be seen to be a reward which had no detrimental side effects, like delaying the next stage of their training or causing them to miss out on leave.

• Maintaining personal contact regularly with departed submariners, such as three, six, twelve and eighteen months after separation then annually thereafter to five years. Several submissions pointed to this sort of approach being very likely to be successful in drawing submariners back in, even if only on a short term tenure or as a Reservist.

• Offering financial incentives to people who recruit someone to submarines, paid on award to the recruit of their dolphins.

These are just a few of the many ideas floated during the course of the Review. The opportunities would seem to be limited only by imagination. To be effective though, anything that is undertaken must attract concerted and coordinated effort, be managed as a campaign and engage many stakeholders. It can only be under Navy’s own control.

4.3.1 Direct, Semi-Direct and Directed Recruiting

There has been much talk about these subjects for several years. Evidence of what action has been taken is harder to find. Opinions are as varied as the people who provide them. There is also evidence to suggest that decisions taken and directions given by previous Chiefs of Navy have been either ignored or not earnestly and wholeheartedly implemented.

This approach to recruiting arouses passions among submariners, which probably accounts, to some extent, for previous strategic Navy decisions falling on stony ground. There seems now to be some degree of uncertainty on exactly where these initiatives stand and what action is required. Are they to be acted upon, modified, held in abeyance or shelved?6

5 The ‘Golden Hello’ may be somewhat contrary to the notion of an elite proposed in this report, admitting to the need for artificial attractors rather than letting the elite nature of the force work in its own favour. Such an approach may be worth considering if recruiting from within Navy is not as successful as required.

6 This situation, among others, suggests a need for a wholesale aggregation of past initiatives that may be underway, such as Project Nautilus, to ensure that all actions associated with them are refreshed, cancelled or replaced under whatever initiatives emanate from this
success with directed recruiting is well known to Australia's submariners, who appear opposed to that approach and cling to the desire to retain a wholly volunteer status, possibly from a sense of their own elitism. Given that Navy has shortages in many areas, direction across all capabilities may now be warranted. The prevailing operational requirements and long-term capability sustainment, among other factors, would determine the need. In the prevailing circumstances, the graceful degradation of some capabilities, including the submarine capability, may be necessary.

**Key Observation**
Navy needs to decide what direction it wants taken on the direct, semi-direct and directed recruiting approaches to generating submariners then enforce that decision.

4.4 RESERVES

There is robust evidence that there are worthwhile numbers of submariners on the Reserve who are willing to help generate and sustain the submarine capability. Equally evident is that Navy’s approach to them is unproductive. The Reserve management system seems to have a ‘post it and pray’ approach, where if someone wants a Reserve for a specific task, the job opportunity is posted on the website like a newspaper classified advertisement. Filling the position relies on a Reserve person showing the interest to respond from there on.

Active canvassing of Reserves may be a part of the business model but from the submissions received from submariner Reserves it would appear not to be actively and routinely employed. Taking a front foot with submariner Reserves, by making the first approach and asking about availability and jobs they might like to do, may get a better outcome from Navy’s perspective.

4.5 EX-SUBMARINERS

Many of the responses to a letter inviting departed submariners to have an input to this review identified that recruitment opportunities exist for Navy among that group. Several said that had Navy shown interest and kept in regular touch with them, there were times when they would have been very receptive to a suggestion that they rejoin, even though the idea had not occurred to them. This is an area where Navy seems not to have reacted well to contemporary practices

Review. If this is not done, there is a risk that the limited available effort will be dissipated on activities other than those the Chief of Navy wants progressed.
in the Australian labour market. People who are willing to be mobile to satisfy their personal development desires, or become available when personal circumstances change will often respond favourably to options and choice.

Others identified that Navy’s lack of flexibility in recognizing the experience they had gained on the outside was a significant disincentive to re-joining. While most gave the impression they had a pragmatic understanding that Navy needed to make sure those who rejoined did not disadvantage the careers of those who had remained serving loyally, there was need for a more balanced approach which recognized, through the rank and seniority given to re-entrants, that they had gained experience that was valuable.

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<td>There are most likely ex-submariners who’s service could be engaged if Navy could be more flexible in tailoring employment options that meet their needs.</td>
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4.6 SEAMAN SUBMARINE OFFICERS WITHOUT PERISHER

In common with many elite organisations, the submarine culture is to expel or reject from the community those people who fail at a particular point. This certainly appears to be the case with seaman officers who fail or do not undertake the Submarine Commanding Officers’ Qualifying Course (COQC – ‘Perisher’). Whether completely true or not, this is the perception held commonly by officers who find themselves in this position. While this approach can be sustained if there are plenty of people and the ‘non-Perishers’ are in lesser numbers, in the current circumstances this approach seems very counter-productive.

Naturally some of these officers will have no great desire to continue with a career in submarines once they reach the point of being unable to achieve submarine command and will wish to leave submarines to pursue other goals. But the evidence clearly shows that there are some for whom command is not the ultimate goal and these officers would welcome a chance to make an ongoing contribution to the capability. There would seem to be no shortage of opportunities to productively employ such officers in such areas as submarine escape and rescue, tactical development, doctrine, training, human resource management and project management. There are likely to be others.
4.7 PROJECT KLAXON

Project Klaxon is an excellent initiative of the Submarine FEG that aims to identify the causes of the current high separation and suggest solutions. It is a very detailed individual survey-based data gathering and analysis exercise that has been carefully and meticulously executed. A very large volume of qualitative and quantitative data has been gathered and analysis is well advanced.

Although not complete at the time the review officer was briefed, it appears to have significant potential utility in providing a deeper understanding of the current problems. Project Klaxon addresses many issues other than those covered in this report and for that reason alone it should be supported to run to conclusion and the outcomes examined closely. Expectation management is one issue of concern with this laudable initiative. The survey involves the collection of data that could and may be used to facilitate a sensitivity analysis of the effect of changes of a range of conditions of service, including financial. Care must be taken not to unwittingly give rise to expectations among those surveyed that this project may not be able to satisfy.
CHAPTER 5

MAJOR SYSTEMS

5.1 THE SUBMARINES – AN OVERVIEW

HMAS COLLINS, lead boat of the class, was commissioned in July 1996. The last boat, HMAS RANKIN, commissioned in March 2003. So while Navy has over a decade of experience with the class, less than half of that time has been with the full fleet of six submarines.

The boats have been subject to well publicised, extensive and almost constant planned change in that time. Apart from many platform issues that needed investigation and correction early on, there have been the so-called Fast Track upgrades, new propellers, HMAS COLLINS’ hull weld repairs, the replacement combat system, new torpedoes, communications and mast upgrades and more. Some of these changes have had enormous and long lasting impact. For example, the changes made under Fast Track were arguably more than the totality of the changes made to the Oberon Class throughout their life. There is also an emerging understanding, gained from our experience operating the boats, that we have been doing more maintenance on them than is necessary.

Reminding ourselves of two contextual issues is timely. While these may appear obvious they are nevertheless worth stating because of the impact they have. The first is that no one else operates the Collins Class submarine. The boats are unique to Australia. What we learn about this complex machine, we learn for ourselves, from our own experience. It is not unreasonable to say that we are still on the steepest part of the ‘learning curve’ with the Collins Class in many respects, which will probably remain the case for another five years or so. Expectations of what should be achievable from the submarine capability today seem not to recognise this fact and may be unrealistic as a consequence.

The second point is that submarine operations are a fundamental element of the training philosophy behind generating and sustaining the submarine workforce. That is to say that trained submariners cannot be generated unless they can go to sea in a submarine. This would be the case regardless of the sophistication, quality and availability of shore based training systems. Just as a pilot cannot obtain his ‘wings’ without flying a real aeroplane, an RAN submainer cannot obtain his ‘dolphins’ without completing a part of his...

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1 The frequently quoted case of the Captains of commercial jet aircraft being able to qualify for their captaincy on level five simulators, without flight time in a real aeroplane, is irrelevant. They are already qualified pilots, with substantial live flying experience by this stage. It is not universal practice and many airlines still require a live check flight.
training at sea in a submarine. This is the common practice among submarine operating nations.

The requirement for training at sea is quite small in the overall scheme of training, being around 30% of the task book for SMSQ. Indeed some have argued that it is too little to be both effective and efficient and that this is contributing to the decline in experience levels. Much can be (and is) achieved in a submarine alongside and in shore based trainers, simulators and emulators. But a submarine at sea is and will remain an indispensable part of submarine capability generation and sustainment. While some might argue that this approach to producing trained submariners should be challenged in these days of high fidelity simulation systems, protracted living and operating in an enclosed environment of the nature of a submarine cannot be easily or well simulated.

From the perspective of achieving a sustainable submarine workforce, the capacity to generate trained submariners is a function of the amount of training that must be conducted at sea, the availability of submarines in which to do that training and how the submarine is scheduled in the Fleet Activity Schedule (FAS). Training and scheduling are discussed in other Chapters of this report.

### 5.2 SUBMARINE AVAILABILITY

Growing knowledge from experience operating and maintaining the boats has led to plans that are close to fruition to extend the period between dockings to a Usage Upkeep Cycle (UUC) of 3 years. Further extending the UUC is thought to be possible. This will generate an expectation of a higher level of availability but there are other factors to be considered and it would be unwise to be optimistic of too much more availability. The future appears to hold many more issues to be confronted that will have the impact

There are obsolescence issues that will demand complex and lengthy replacement or upgrade action. One is one. There are, and will continue to be system upgrades needed in pursuit of interoperability with allies and a materiel edge in capability over potential adversaries. There also seems to be a large appetite on the part of the submariners and ASC to make changes to the boat. The industrial capacity built up during the submarine construction program needed feeding to keep up ASC’s design skills and appears to have resulted in an almost endless loop of change and upgrade.

Like many parts of the Navy, the submariners display a marked enthusiasm for acquiring the latest and most capable equipment and systems but developing the ability to operate it seems to attract insufficient attention.

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admission, the submariners have taken little or no account of the impact on submarine availability of such changes or the implications for generating the workforce that result.

There are many more modifications needing to be made to the boats for a variety of other reasons. For example, there are configuration changes still outstanding as part of the upgrade and alone the many other upgrades that have been undertaken.

Below is submarine forecast and actual availability data for the period since all six boats have been in service, based on unit ready days (URD) reported to Government:

Understanding what the generation system provides is an important part of the overall picture of a sustainable workforce because of the training philosophy mentioned earlier.

The recent ANAO audit assessed, from the original contract requirement for 75% availability, that there should be about 1600 days a year (6x365x0.75) of submarine availability. This fails to take into account that there is not the level
of resourcing necessary to operate the boats for this many days, either in personnel tempo or sustainment funding terms.

**Key Observation**

We will continue to achieve lower than the theoretical best platform availability for a range of reasons that are part of the 'normal state' under the philosophy with which the RAN approaches submarine ownership. Submarine availability imposes the limit on capacity to generate submariners.

There will always be material differences between boats for this reason, sometimes quite major in nature. This will complicate ship's company management.

5.3 THE SUBMARINE ABANDONMENT, ESCAPE AND RESCUE SYSTEM (SAERS)

Currently out of service following intolerable system failure in 2006, this capability is attracting close scrutiny from DMO and Navy. It has never met Navy’s requirements, which arguably it should have before the system failed.

The SMFEG is pursuing a strategy for SAERS to achieve operational release (OR) by ensuring the capability passes through each of the stages displayed in Figure 4. Timely success of this reverse engineering strategy depends on resources and funding being at levels normally associated with development of new capability projects, and contrasts the resource and funding priority placed on the capability previously thought by leadership to be satisfactory, and compliant. Until the SAERS capability passes through each of the stages displayed at Figure 4, it will not be possible for Navy to have any confidence in SAERS safety or efficacy.

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2 The ASRV Remora near miss, which came perilously close to killing two civilian contractors.
Figure 4. Pathway to SAERS Operational Release (Source: SAERS Manager)
The SAERS system failure in 2006 was a timely warning but one to which Navy appears to have been slow to pay sufficient attention.

The Australian Rescue System Vehicle (ASRV) Remora component of SAERS is a manned remotely operated vehicle (ROV). The through life management requirements for Remora fit most naturally with those already used to manage the submarines. For some reason however, ASRV has been managed differently from the submarines and it is not clear that Navy, for whom the outcome of ASRV failure would be most severe from several perspectives, understands the attendant risks of having adopted a different management approach. Navy needs to support SAERS as it would any other operationally directed capability.

A training continuum and workup requirements for the SAERS have not been tailored to ensure the operational readiness of the capability is properly maintained to meet contingencies. Understanding of the true cost of operating the system is consequently limited. Navy has neither exercised nor operated the whole system in response to a disabled submarine incident requiring rescue and medical treatment of a whole submarine ship’s company. Consequently any assessment of the SAERS’ ability to deliver a viable rescue service is based on judgement alone.

A number of important limitations have arisen as a result of the current SEARS circumstances, key amongst which is understanding the impact of SAERS unavailability on the sustainable submarine workforce.

A direct result of SAERS being unavailable has been:

This clearly has a significant impact on the capacity to produce trained submariners and, among other reasons, emphasises the importance of achieving quickly a fully functioning SAERS system.

5.3.1 Pressurised Submarine Escape Training (PSET)

PSET is undertaken at the Submarine Escape and Rescue Centre (SERC) in Western Australia. This training has not been possible since May 2008 due to delays in entering a contract for the conduct of that training. DMO and the preferred contractor are in discussions / negotiations with a view to being in contract before the end of November 2008.
Delays in entering contract for PSET are gradually increasing the backlog of personnel who require this training\(^3\).

The Navy policy is for all submariners who are posted to seagoing positions to be in date for PSET. This requirement is aimed at increasing the probability of seagoing submariners being able to escape from a disabled submarine if circumstances allow. The SMFEG Commander has increasingly been required to exercise his prerogative to provide waivers for those occupying seagoing positions who are unable to complete the PSET, and although operations have not suffered because of this to date, the number of personnel who cannot comply with the PSET currency standard has been gradually increasing, which in turn increases their risk during an escape.

The SMFEG is considering options to solve this problem if the DMO is unable to contract for SERC services as expected. Options being considered are:

a. re-tender for SERC services,

b. return SERC to uniformed staffing,

c. send personnel to overseas submarine escape training facilities for PSET, or

d. a combination of any or all of these.

Retention and management of appropriately qualified uniformed hyperbaric medical sailors and officers has proved to be problematic and stands to jeopardise Navy’s ability to integrate specialist medical personnel into an organisation charged with both supporting pressurised submarine training and coordinating mass casualties likely to result from a disabled submarine incident.

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\(^3\) There are currently initial submarine trainees requiring training and submariners posted to submarines for whom a waiver to remain at sea has been approved. They are required to complete PSET at the first available opportunity. There are submariners forecast to join a submarine who need refresh their PSET qualification.
CHAPTER 6
ORGANISATION

6.1 SENIOR SUBMARINER REPRESENTATION IN CANBERRA

Several times during the course of the Review the opinion was offered that the Submarine FEG Commander is in the wrong place. The most common view when this comment was made was that the position should be focused on those issues relating to submarine capability that are centred on Canberra. An occasional view was that there is also a different psychology at work in Western Australia compared with much of the rest of Australia, which is not necessarily always helpful in managing Navy’s nationwide business. There was also a view expressed several times that having a Commodore running is overkill and the job should be well within the reach of a Captain. Navy’s history suggests this is true.

The reason for the Submarine FEG Commander being a Commodore is now hazy but with that decision made, locating him in the West stemmed from a desire to maintain a one star officer there for representational purposes and, more importantly, to provide senior oversight to the half of the Fleet based there. This is understandable although the current chain of command arrangements which give the resident Commodore military rank but no positional authority over any Fleet unit based in the West seem less than ideal.

A cursory examination of history could suggest that when a capability domain does not have senior representation in Canberra, that capability goes into decline. It could be argued that Navy has suffered such an effect in the aviation, communications and health professions in the last 20 years, with serious consequences that take much time and effort to overcome.

Notwithstanding that concerted and sustained effort will be required to put the submarine workforce on a path to recovery, lasting success will depend as much on the broader Navy maintaining focus on that outcome as it will on efforts by submariners at the waterfront. Prevention of a recurrence of the current decline may be aided by having a senior submariner physically located in Canberra so as to be able to champion the capability directly with CN and the other key strategic influencers and decision makers in Navy and Defence more broadly. The early discussions relating to a decision on acquisition of a submarine to replace the Collins Class sharpens the argument for senior submariner representation in Canberra.

On balance though, while the argument for a senior submariner in Canberra has some merit, it is unconvincing in respect of the FEG Commander. CN may wish to have this issue considered in the forthcoming Navy structural review.
A more important issue appears to be the SPO’s sole responsibility and accountability to the DMO. If the recommendations in the Mortimer Report are adopted, this situation will become much more significant.

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<td>There appears to be a need for senior operational submarine expertise in Canberra, perhaps in the key functional areas of Navy headquarters.</td>
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6.2 ENGINEERING IN THE NAVY

Today’s Navy depends heavily on technology and engineering in a way and to an extent that goes well beyond repair and maintenance. Navy must comprehend deeply the design and development of new ideas and the conversion of new technology into systems using engineering principles if it is to succeed in transforming them into capability that its people can employ safely and effectively in the maritime domain.

There has been an argument advanced during the course of this Review by a well-regarded senior ex-Navy engineer that there is an insufficient focus on engineering within the Navy. This argument is canvassed in this report because it makes sense, has a solid basis in fact and has an important connection with the workforce issues Navy is facing in the submarine community.

From many vantage points, the prospects for anyone pursuing an engineering career in Navy today have declined. There is only one engineer position in the Maritime Development branch in Capability Development, where future engineering policy should be discussed and debated along with the military capabilities of the future. There is also evidence that some policy decision making in Navy tends to overlook engineering factors.

At a time when Navy is suffering debilitating shortages of engineers of most types, it is perhaps curious that the Chief Naval Engineer is a part time job. With the project, ship repair and maintenance elements of naval engineering all residing outside the Navy, young engineers cannot see clearly their prospective career path or the professional development opportunities that are needed for them to be competitive in their profession. Navy must do better in this area in the long term interests of sustaining capability output.

There are very few job opportunities for senior Navy submarine engineers in Canberra, which is a vital place for them to be for their own sake as well as for Navy. This is because Canberra is where important naval engineering and policy decisions with an engineering dimension are being made, particularly in respect of the current submarine fleet and the proposed new generation submarine.
The engineering situation in Canberra is similar to that discussed in the previous section about the absence of a senior submariner. Not only does there appear to be a need for senior operational submarine expertise collocated with CN, there is arguably a need for senior submarine engineering expertise to be alongside it.

A key player is the DMO, where a significant part of the career opportunity for Navy engineers exists. In light of the Mortimer Report, it is timely to consider whether the proposed DMO arrangements adequately recognise the ongoing importance to Navy capability of professional engineers and do enough to guarantee their sustainment.

There are other important issues with Navy engineering. The operator/maintainer concept within which Navy's approach to technical sailor training has operated for the last two decades has been overtaken by technology. These days far less call is made on the technical skills of junior sailors than in the past. Junior sailors do little more than repair by replacement and contractors do most work beyond that level. There is still a need for some level of diagnostic ability although modern systems, especially electronic systems, tend to have fault diagnostics built in. Some basic skill at 'wielding a spanner' is still necessary, particularly for marine technician sailors.

The demand today is for junior people who have sufficient training to enable them to become skilled operators, rather than the traditional trade trained people that Navy largely still aims to produce. These people are given very lengthy courses only to become frustrated when not allowed to do the work they are trained to do. This was discussed in more detail in Chapter 3.

The result is that while Navy continues to train its technical people in the same way as it has for many years, the opportunities do not exist in the working environment for those people to use and develop their skills. The consequence is that they become dissatisfied because they cannot do the work for which they are trained. They also become less attractive to industry because they are not sufficiently skilled to compete against their civilian counterparts for the available work. Given plenty of work outside and little opportunity inside, the incentive to leave the Navy quite quickly becomes greater than to stay.

Navy must change the training and career pattern for junior technical sailors. Contractor maintenance will not go away and the means for providing the sailors with development opportunities combined with satisfying work throughout the career continuum must be created.
Compounding the complexity of the problem for Navy is a continuing need at the senior sailor level for the more traditional style of skilled technician who has as deeper an understanding of the systems as was ever the case. Senior sailors must be much more than just skilled operators. This deeper level of basic technical and system knowledge is necessary to meet broader system management demands, ensure the platforms have sufficiently skilled diagnosticians able to undertake more complex tasks so that the mission is not compromised unnecessarily and to ensure Navy stays a properly informed customer and end-user of the work of contractors. This applies also to engineering officers, especially in the context of their work inside the DMO.

According to one senior DMO officer, Navy engineering officers are not faring well in the fight for those senior positions in the DMO that are open to competition. The reasons appear to be largely that they are not sufficiently developed in their Navy careers. While the importance cannot be understated of having Navy engineers in many positions in the DMO, the fact is that the current career paths for Navy engineers who become officers are arguably not optimal for their development in this respect. This point may be contentious but it is the view of senior decision makers in DMO and should be looked into for that reason alone.

Navy needs to recognise some shifting attitudes in the wider community and take steps to exploit the opportunities while putting in place measures to manage the attendant risks. For example, there is data that shows women are increasingly looking to the Defence forces to obtain skills that are not the traditional domain of women and not readily available to them outside for that reason. Technical skills particularly seem to be in their sights. The fact that 60% of the approved gap year applicants are females warrants careful consideration.

There is some very important work being undertaken in Navy Systems Command on some of these issues, which Navy must progress urgently. Add to the existing challenges with people the changing nature of the engineering professional environment and the fact that Navy will shortly be bringing into service a fundamentally new and very challenging propulsion technology in the new amphibious ships and the need for a fundamental re-think of engineering in Navy begins to become clear.

**Recommendation 2**

*‘Strategic Review of Navy Engineering’*

A comprehensive strategic review of the role of engineering in generating Navy capability broadly and the submarine capability in particular should be undertaken, as a matter of priority.

### 6.3 A FLAWED SUBMARINE CREWING CONCEPT

The Scheme of Complement (SOC) for the Collins Class boats has
There are only two options when this happens; fail to meet the program or find a replacement. Given the submarine community’s intense focus on achieving the program (see discussion in the People chapters), replacements or ‘op reliefs’ have become the most commonly chosen of these options.

This has become such established management culture that it is the primary, indeed almost exclusive and certainly the largest source of work for the Human Resource Management Cell in the Submarine FEG Headquarters.

The effect of this approach on a community that is already severely short of people is counter productive in several ways, not least because it is a major source of intrusion into respite. Aspects of this management approach were witnessed during the Review with many more stories heard of this approach to keeping the boats at sea, and the consequences that follow. The intense mission focus combined with reliance on the doctrine of op reliefs, which is usually applied in a very demanding, often dictatorial and almost bullying way, results in uncaring and often unreasonable management of people where recognition of an individual’s need or legitimate desire for respite, or personal circumstances, are not given much recognition.

The evidence suggests that too many submariners actually decide to discharge rather than continue to endure this regime.

The 80/20 rule seems to be at work in respect of op reliefs. Twenty percent of the people fill 80 percent of the op relief requirements. There are some people for whom being an op relief is a preferred life style, even if only for a relatively short time. There are as many reasons for this as there are such people but it is clear that the submarine community nurtures those who will reliably put up their hand to be an op relief for that fact.

The important point appears to be that providing a structure that gives people the option of making themselves available as op reliefs may be important to bringing about a sustainable submarine workforce. An analogy is the ‘forego shore time’ option in Navy’s broader personnel management structure. The central issue is the notion of choice.

Current practice in the submarine force creates some effects that are undesirable at best, risky at worst. For example, there seems to be a practice of op reliefs filling billets to achieve specific objectives, like bringing a boat out of ASC or undertaking a work up. When the task is done, or when a replacement becomes available, the individuals are posted away, sometimes
to the next op relief task.

This sort of behaviour fails to conform to the Navy doctrine of the fundamental importance of the ship's company as a team and is contrary to the purpose of a work up and readiness assessment. It demonstrates too the fragility in the workforce, the true state of which is camouflaged because the focus is on the number of submarines able to go to sea, not the capability, integrity and sustainability of their ship's company.

The current SOC is flawed in terms of growing and sustaining the experienced people needed in higher ranks. Right across the SOC there are instances where people must be grown for one position from a single developmental position in the rank below. This arrangement makes no allowance for the failures and losses that inevitably occur and diminishes greatly the mathematical probability of assembling a complete ship's company.

The SOC is deficient in other ways when seen in the broader context of how Navy manages and supports the submarines. These deficiencies place additional burdens on the people in the ship's company. See earlier comments under Work and Workload in Chapter 3. There is a lack of logistic and administrative support built into the SOC (i.e. submarines have no Supply Department), neither is there any in the shore organisational structure supporting the boats. Much reliance is placed on support from the Joint Logistic Unit – West but that unit is neither staffed nor does it have responsibility to provide the full range of administrative and logistic needs of the boats. The same follows for the Submarine FEG headquarters, where there is a single Supply Officer position.

Some of Navy's own language appears unhelpful. Submarines are classified as major fleet units (MFU), a term that subconsciously creates a complex, multi-dimensional understanding in people's minds. A Collins boat may well deliver the combat power of an MFU but the ship's company is similar in size and make up to a coastal mine hunter, which Navy considers to be a minor war vessel (MWV). For MWV, Navy embeds a level of organisational support ashore that is much more comprehensive that is provided for the MFUs or submarines.

The classification MWV does not provide the answer either. Like MFU, it creates a certain understanding that does not fit comfortably with the submarines' particular needs.

The fact is that submarines are neither MFU nor MWV; they have unique support needs that require a tailored organisational structure to satisfy. No such organisation exists.
To illustrate the point, in conversation with one senior officer on a particular submarine’s program (a program that several submariners had characterised as inhumane) the comment was made that the program in question was no more demanding than frigates (an MFU) were regularly asked to achieve. This may be true, but Navy would be very unlikely to similarly schedule a mine hunter (a MWV) without significant external support.

One is prompted to ask why the submarines given inhumane schedules, noting that the schedules are written by submariners. There is a variety of reasons but the MFU ‘tag’ does not help.

### Key Observation

The Collins Class crewing concept is flawed and has led to practices and behaviours that have damaged submarine workforce sustainability.

### 6.4 WORKFORCE STRUCTURES

There is a body of opinion that appears to be widely held that Navy needs to reassess its workforce structures to bring them more into harmony across Navy and with practice in the commercial world.

For example, looking within Navy, it has been suggested that one reason behind the chronic shortage of sailors is that Navy’s workforce structures act as an impediment to in-service recruiting. Any General Surface sailor aspiring to be must go through a transfer of category process, which is lengthy and bureaucratic. The category that is the nearest General Service equivalent is the a category also suffering critical shortages and from which applications for transfer of category are not generally accepted. If both groups were the same category, this largely artificial barrier would be removed, the transfer of category process would not be necessary and the movement of current sailors into submarines would be simplified. Prior to 1993 there was a direct equivalence between surface and submarine warfare sailor categories were the same category in both communities, identified in the submarine community by the addition of the ‘SM’ suffix. Transfer between the two communities was a simpler process as a result.

This is one example but there are probably others elsewhere in Navy, such as the These categories do not have a close equivalent in the civilian labour market, which complicates the recruiting process and possibly acts as an impediment to attraction, an argument that emphasises the need for a review of Navy workforce structures.
The Whole Ship Occupational Analysis Study conducted in 2007 as part of the Sea Change program is a step in the right direction, providing essential preliminary data for a review of work and departmental structures with a view to rationalising the way in which ship’s companies are organised\(^3\). This would be a high level review with outcomes reaching across Navy, not just the submarine force. Once this work is done, the essential basis will exist from which to rationalise training continuums. It is an activity that would be essential to underpin the fundamental structural changes that might be envisaged as a result of a strategic review of engineering in the Navy, mentioned in Section 6.2.

**Recommendation 3**

*Workforce Structures*

Navy needs to undertake a ‘whole ship review’ to reassess its workforce structures and ship’s company organisation models, as a precursor to the overhaul of the current approach to delivering training (see Chapter 10)

### 6.5 IDENTITY AND ESPRIT DE CORPS

The loss of identity and integrity, and the camaraderie and *esprit de corps* that flowed from it when the Squadron had a dedicated home at HMAS PLATYPUS, that it did not share with anyone else, is an issue that has been raised by many people. Many appear to have a good level of understanding that there were some serious negatives in those days and there was no sense of a ‘rose coloured’ view of that era or of a longing for the past. Rather there seemed to be recognition that a key part of their identity as an elite force has been lost, which is not necessarily connected with being in the West. The submariners are quick to see what Clearance Diving Team 4 and the SAS achieve in this respect but they also point to the benefit those units accrue from having their own dedicated, identifiable ‘home patch’.

There is no doubt that submariners see themselves as an elite force and that is also how many outsiders, including politicians, view them. They see being elite as an attractor and a retention incentive, as do others, but they also believe that the ‘big Navy’ works hard against that notion and does not want them seen that way. They talk of Navy’s deliberate ‘graying’\(^4\) of the submarine arm and there is no doubt that their perception is that the broader Navy has a jaundiced view of them – with some justification.

As one senior submariner said:

> "There is a sort of double standard being applied here. If we are just another part of Navy the same as everyone else then why don’t people just get posted to us, in adequate numbers, the same as everyone else? Why do we"

\(^3\) This is the notion of a ‘whole ship review’, the need for which has been spoken of in Navy for at least a decade.

\(^4\) A reference to the surface Navy’s gray ships and gray combat coveralls.
rely...on people volunteering or taking the first step? If we relied on volunteers to man Kanimbla and Manoora they wouldn’t go to sea... no-one would volunteer to go to a 1950’s vintage non-combatant. So why are we taking this approach with the SM workforce?? On the other hand, if we’re not just the same as any other part of Navy, why don’t we recognise this in our manning policies instead of trying to have a bet both ways.”

Perhaps the time has come for Navy to decide which of these paths is to be followed. This is a morale issue of some consequence, the impact of which is difficult to measure but it does appear to lie at the heart of the current problem.

A recent consultant’s report to Defence Force Recruiting offers some interesting insights on this issue. The report observes that a submarine career is widely seen outside Defence as being ‘challenging, cool, exciting, elite and something very different’. The consultant commented that there seems to be no shortage of interest in a submarine career, compared with Navy’s needs. But some people whose interest did turn into enquiry were troubled by feeling themselves pushed into submarines. Their view seemed to be that an elite force should be hard to get into.

The notion of military elites is an uncomfortable one. It conjures up images of favouritism, privilege, superiority and standards that are unobtainable by the majority. It creates angst because, at its heart, it assails the virtuous thought that all humankind is created equal. But elites can and do serve a necessary military purpose and it is misunderstanding and misperception that normally breed enmity towards them, as much as anything else. Properly managed, reinforcing the submarine force’s elitism may be a useful adjunct to the recovery process.

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<th>Key Observation</th>
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<tr>
<td>The demise of 'The Squadron', as it was when the submarines were based at HMAS PLATYPUS, is an issue that warrants further examination and better understanding, in the context of consciously deciding whether to exploit the potential that exists for recovery in the notion of the submarine force being explicitly held up as an elite Navy force.</td>
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Note that there is no suggestion here of recommending a return to the PLATYPUS model. This could not be achieved sensibly and will be harder with the passage of time and likely movement towards 'super bases'.

If the broad sense of this suggestion is agreed and action is taken to address it, a matter such as this must not be left to the submarine community to determine for themselves.
6.6 SELF-SERVICE SELF-ADMINISTRATION

The ADF has moved a very long way towards personnel administration being the responsibility of the individual, using self-service means. A very common view from the younger submariners is that personal administration is a demanding part-time job because of the amount of time-consuming follow up required. The 'system' is seen to be incredibly complex and disconnected, hard to access, learn and come to grips with and hard to find help dealing with. It seems focussed on being easiest for those providing the service, unresponsive and all too often unhelpful and uncaring in its attitude towards the individual. The onus on achieving a reasonable outcome lies with the individual, who has to 'jump through a large number of hoops' put in place by the system ostensibly there to serve him or her. These appear to be the characteristics of the 'call centre' era in which we live, all in the name of efficiency or economy. The real cost appears to be disgruntled people who are inclined to choose other employment as a consequence. This suggests it is false economy.

By way of example; members applying to either commence or cease Rental Allowance must fax some 20-25 pages to DHA. Anyone who has tried to do that will know how often pages in a fax of this size go missing. Much of the information required is on PmKeys, which DHA is not authorised to access. The extra irritant that all too frequently accompanies this sort of frustration is then to have to deal with staff who show little empathy with the issues associated with geographical dislocation, home ownership or removals. A more user-friendly system for this and many other administrative tasks, designed and administered with the customer in mind, would result in Defence being seen to help its members, which is most certainly not the way people see it today.

Some of the stories in this domain sounded like tales that were commonplace 20 years ago. The impression is that Defence seems to believe such problems have largely been overcome but from the way people spoke; even a modest expectation of reasonable service still seems beyond reach. Making this situation worse for people in a submarine ship's company is the stressed Divisional System and the absence of the sort of skilled specialist administrative support normally available from within the ship's company of an MFU or from a shore staff for MWVs.

6.7 REMUNERATION

Few people said that money is a huge issue in the submarine workforce situation today, although there are some parts of the community who feel 'disincentivised' compared with their General Service counterparts – the gap between those two parts of Navy has narrowed too much for their liking. There appears to be several anomalies in the system, which create unhappiness and should be re-examined. For example, having MFU and SM XOs and COs on the same pay level is seen by submariners as unfair, noting that the SM officers must have obtained some very demanding additional
qualifications over their MFU counterparts. The submariners’ view is that this should make them worth more money if there is to be any attraction to doing it. That point may be arguable, noting the payment of submarine seagoing allowance but there are other anomalies as well.

Simply put, money is divisive and the recent move to a new pay structure will require a willingness to admit that the way in which it was implemented in the first instance will not have been perfect. There needs to be, and be seen to be, a concerted effort to follow up and a willingness to quickly address anomalies.

Recommendation 4

‘Review Placements in GOPS and GORPS’

Navy should examine the anomalies in GOPS and GORPS that have been identified by the submariners, in consultation with the submarine community, with the eventual outcomes and the reasons for them being carefully explained to the submariners.

Overall however, submariners’ pay and allowances are not seen to be major problems at the moment, except by a few vocal people. Commitment to making sure this situation is sustained over time will be important and may prove challenging if the Western Australian economic boom continues after the current world financial crisis settles down. The crucial issue is to maintain a competitive package of superannuable remuneration.

The recent Navy Capability Allowance (NCA) is seen as providing tacit recognition that the basic pay rates for submariners are insufficient and not competitive. The view is that the NCA amount was not enough and it will keep only those people who would have stayed anyway because it does not address the issues that are causing people to leave. Furthermore, the fact that it was not paid to everyone has been enormously divisive.

Notwithstanding many comments from sailors that criticised their officers, many sailors said they felt the officers had been ‘dubbed’ on this issue. There is a view that the way this money was paid constitutes a strong retention disincentive for those who ‘missed out’. One officer said that there is a general consensus that the NCA issue has ‘damaged severely the Navy’s relationship with its submarine officers’. We may not know with any certainty if the facts bear out this contention over time.

The NCA has created some interesting outcomes in submariners’ eyes. For example, a submarine Navigator is now the second lowest paid person onboard but the one who routinely works the longest hours. Only the steward is paid less. The Captain is the fourth highest paid, after three senior sailors, the DMEO, DWEO and COB. Notwithstanding any positive attitudes by those who received the NCA, broadly people feel that the people who made the decision are clearly stupid. Interestingly, several submissions from families made the same point.
There was a common complaint that the NCA is not something that helps them buy a house in the increasingly tough market because it does not help them get a bigger mortgage – financial institutions do not include such allowances in calculating one’s income stream for the purpose of determining eligibility for a housing mortgage.

**Key Observation**
The NCA and the way it was applied received a resounding and almost unanimous ‘thumbs down’ from the submariners.

Whatever action has been taken following previous retention and completion bonuses paid to submariners has not been effective. What Navy elects to do next will be critically appraised by the submarine community.

The amount of the NCA for submariners would likely have been accepted more graciously if not for the fact that it is taxed. Submariners hate paying tax as much as most Australians but it is the sort of thing that the leadership should perhaps be dealing with better than it would appear to have done. The same can be said in respect of properly explaining and selling the submariner remuneration package in total, which appears not to be very well done. Note however the previous comments about a stressed divisional system.

**Key Observation**
Not enough has been done to fully explain, to the sailors particularly, the full value of their remuneration package. A well prepared, proactive engagement from the submarine senior leadership on this subject would be useful.

There is dissatisfaction also with the administration of Service Allowance. There is a view that if Navy is not able to provide trainees with sufficient platforms to enable them to achieve the qualifications they need to move from the training to the trained force, then there should be some sort of provisional protection arrangements that shield the individual from financial detriment that is beyond their control. For those people in the training force who are subjected to all the ‘unique characteristics of military service’ as counterparts in the trained force, there would seem to be no sensible reason why Service Allowance should not be paid. There is an underlying question of the point at which a submariner actually qualifies and becomes eligible for Service Allowance. This issue is within Navy’s responsibility bailiwick and it would appear worth examining because it is quite clearly a significant irritant, especially to the junior sailors.
6.8 CIVIL ACCREDITATION

This is an important issue for everyone, not just technical people. Having meaningful qualifications that are recognised in the civilian labour market is a retention incentive, not the opposite as perhaps Navy seems to fear. Survey data shows that people who do not or cannot obtain such qualifications will be more likely to take early discharge than those with accredited qualifications because they get very nervous about being unemployable outside when they do eventually leave. This is especially relevant to technical sailors – see Section 6.2.

6.9 NON-FINANCIAL CONDITIONS OF SERVICE

Looming largest among issues related to non-financial conditions of service for submariners is frustration over the ability to take leave to achieve predictable respite, which has been examined in Chapter 3. There are some other issues that are worth mentioning as well. The strategic directive to drive down leave balances has created problems and dissatisfaction because of the way management has gone about achieving the objective. People who are unhappy that they cannot reliably and predictably take their annual leave are even more irritated when forced to expend it for a range of minor administrative tasks that arise from time to time and for which ‘unchecked’ or short leave from duty is a more appropriate vehicle. One example is when they are required to accompany tradesmen conducting maintenance on DHA properties but there are many others.

The administration of Extra Recreation Leave (ERL) is also an issue, with people who are hard worked by any measure required to spend time justifying ERL. There is a need for a more streamlined system of ERL administration.

Although not unique to submariners, these are issues which, combined with a host of other relatively small but important factors discussed in this report, undoubtedly impact retention by causing people to reach the conclusion that Navy really does not care about them. Everywhere they turn they find things made harder than they need to be. Many commented that the interpretation of conditions of service regulations usually worked against the individual. For
example, accommodation on the basis of a posting locality defined as within 30km of the workplace is limiting when applied to HMAS STIRLING but made worse when 7km of that distance is taken up with the causeway.

Many members are prepared to live further away to give them access to the facilities they need for family life, noting the layout of residential suburbs around the Perth, Fremantle, Rockingham area. They also want the flexibility to be able to choose their house as the first decision in moving into the locality, because the other important decisions like spouse employment, schooling and child care must follow from that. The current system makes that very hard.

The cost and availability of childcare are very significant causes of concern and stress among families. There is a need for childcare facilities close to HMAS STIRLING so children are in care for the shortest amount of time and accessible during working hours if required.

Reunion travel, remote locality leave travel and many other non-financial conditions of service came in for criticism during this Review and during the review of non-financial conditions of service that is currently underway elsewhere in Defence. Some of the comments here have been drawn from that review, which is timely and warrants Navy’s close support.

In summary, there seemed to be many people who were very fed up by how hard it is to manage those issues of life that are peripheral to doing the Navy job but essential to get right if the job is to get full attention.

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<td>Navy needs to engage very closely with the work of the Review of Non-Financial Conditions of Service currently under way, to ensure that the interests of all Navy people are adequately taken into account by a project likely to have far reaching and very long term impacts for Navy.</td>
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CHAPTER 7
COMMAND AND MANAGEMENT

7.1 WHAT IS THE OBJECTIVE?

It was identified in Chapter 3 that there appears to be no simple, explicit statement of intent, objective or goal to unify effort in the submarine community. When asked, most submariners could cite an objective but there were as many versions with as much difference between them as there were people to offer them. In the absence of a 'big picture' goal, the Fleet Activity Schedule (FAS) or the operational mission if one is scheduled, has become the implicit goal that most people associated with the submarine capability will work to achieve.

The consequence is that much effort tends to be expended on issues that are short term in nature and narrowly focussed. This has generated a sense of frustration because people perceive a lack of focus on the big issues.

There is a body of evidence to support the proposition that, over a long period of time, a combination of:

- a drive to crew all available submarines, whether doing so was sustainable or not;
- ambitious programming of available submarines, focussed on high end activity at the expense of the essential task of generating submariners;
- an intense focus on the operational mission;
- a culture of surviving on op reliiefs rather than addressing the underlying problems that create that need;
- limited bunk space onboard the submarines;
- constantly changing programs; and
- translating into too little focus on recruiting, retaining and training out of the current problem

Without an explicit framework within which to prioritise effort appropriately, the outcome has been imbalance, where operational activity has won out over the essential generation and sustainment of the people FIC.
Trainees spend large amounts of time sitting around, unproductive and frustrated (intellectually painting rocks as one said) while waiting to get to sea to qualify as submariners. They are frequently posted ashore as soon as they do qualify, without being able to consolidate their training, to make way for others in the training pipeline. Meanwhile, help to create circumstances where the only choice, if the mission or program is to be achieved, is to resort to using op reliefs. This impacts respite, which contributes to individual burn out leading to poor retention that compounds the shortages.

**Key Observation**
The submarine community must embark on a rebuilding program with a focus on retaining as many currently serving submariners as possible, recruiting and training future submariners and establishing measures and structures to prevent relapse in future. A clear statement of the objectives to be achieved, with guidelines and limitations to moderate behaviour, will be a very important first step in setting this program in motion and getting all contributors pulling in the same direction. Responsibility for the outcome, authority and accountability must be clearly assigned, preferably with a single person.

The lack of an explicit goal statement that is understood by everyone associated with the submarine capability has facilitated the behaviour that has contributed to the current situation. Having a statement of objective, with clear indicators of success and measures of performance and effectiveness will be important, but it will not be sufficient. It will be needed so that effort can be focussed and prioritised and to enable resources to be apportioned properly but it must be accompanied by a clear understanding of what will not be done while the rebuilding takes place. There must be a willingness to refuse to do some things, to reject past behaviour patterns and cultural influences and to adjust ambitions to a sustainable level. This must be accepted not only within the submarine community but the wider Navy and Defence as well.

### 7.2 KEY ELEMENTS OF SCHEDULING

Anyone with experience of the FAS will acknowledge that the demands placed on the Fleet exceed the capacity of the available units many times over. There is constant tension between a considerable array of drivers, from preparedness, to the Defence International Engagement Plan, ship's company aspirations, training requirements, exercise programs, public events of significance, personnel tempo guidelines, platform maintenance requirements and many more. Balancing these is a challenge that is made more difficult when there is no clear statement of objective to guide the schedule planners, as is the case with the submarine capability.
There is a useful analogy in Navy's aviation community that is similar to the submarine situation in numbers but very different in the management approach employed.

Navy's 817 Squadron operates six Sea King helicopters. All six aircraft will never be likely to be available. Like the Collins Class, Sea King airframes available for use, with the average being approximately Here the two situations diverge.

The role of the Sea King is utility operations at sea. The Fleet Commander is allocated of the available annual output of airframes – These allocations are an airframe, spares and tools, maintenance crew and a flight crew, which combine to provide a defined envelope of capabilities. This package comes with a funded rate of effort, measured in a number of flying hours.

All Sea King helicopter availability over the allocated to the Fleet Commander is devoted solely to the production of more flight crew and maintainers.

From this simplistic explanation, it can be seen that about of airframe availability is dedicated to generating the trained people that are required to achieve the operational outcome. In fact, the real figure is more than that because maintainers can undertake training on airframes that are not counted in the 'available' number. When all these data are condensed, a simple ratio emerges. Each flight at sea requires an additional ashore – or each embarked flight represents a total airframe resource requirement of aircraft – such that no more than embarked flights can be generated at any time in a single year, from a squadron of six aircraft, without negative consequences.

In the submarine force, the approach is quite different. The proportion of available submarines devoted to producing more submariners is impossible to measure but intuitively it is well short of Unlike the case with the Sea King,

As it is for the Sea King and any other capability, a key to a sustainable submarine workforce is a consistent focus and allocation of sufficient effort and resources, including submarines, to the production of submariners. While the vital importance of individual training is spoken of in the submarine community, it appears from their behaviour to be of subordinate importance to many other activities. Training at sea appears to be a discretionary activity left to the submarine Commanding Officer, not one that has been considered important enough to be driven personally by the FEO Commander or reflected explicitly in the boats' schedules as a matter of course.
Planners appear to try to fit as much activity, especially high end activity into submarine schedules as possible. This creates a constant tension with the need to train individuals.

There was much comment from submariners on time away from home and the demand on individuals that lengthy deployments impose. There seemed to be a general consensus among the more balanced and moderate elements of the community that in a Collins Class submarine in peace time, a deployment is about long enough. Changes to the management of deployments that are recommended later in this report would, if adopted, give relief that may allow this period to be extended somewhat. Those changes, together with a limit on deployment lengths, will impact positively on retention.

Submarine schedules seem to make it impossible for ship’s company to have much chance of being able to take the seven weeks leave that they accrue each year, let alone do much about clearing any back log of leave they may amass. This is a somewhat more complex issue than just scheduling and the solution lies in a different approach to managing the people overall. Recommendations are made to address this issue.

The point has also been made previously that a consistent and sustained focus on recruiting by the submarine community is another key to achieving a sustainable workforce. There is strong evidence that exposure to submarines and submariners can be a very valuable enhancement of recruiting activity. It is clear that the submariners must play an active role in recruiting their way out of the current personnel predicament and they must be supported by submarine programs that have recruiting objectives. For this unique capability to be largely out of sight is to keep it out of mind for many potential recruits and the relatively small active recruiting effort by the submarine community itself is no doubt reflected in the outcomes being achieved.

Contemporary submarine schedules have been such that not many Australians get a chance to see their Navy’s submarines first hand and very few submariners get an opportunity to visit their own home town. This was mentioned often by the submariners, many of whom wanted to visit their own home towns and other Australian ports as well. This is a common and understandable Navy-wide attitude but for submariners there is an additional motivation. Although not a major issue, some submariners have been dismayed by the lingering negative public image of the Collins Class and they would like to be able to have the chance to dispel that image. To do so would probably be a useful adjunct to recruiting, as well as giving a fillip to submariner morale and esprit de corps.
Key Observation
A different approach to scheduling submarine activity is required if a sustainable workforce is to be achieved, which must explicitly factor in activity focussed on individual training, public relations and recruiting.

Serious steps must be taken to refocus the activities and the submarine community towards generating new submariners and sustaining the existing ones as a primary goal, even at the expense of individual boat programs and other Navy aspirations.

7.2.1 Caution

There is a risk of repeating previous unsuccessful attempts to rescue a parlous submarine personnel situation.

they are undoubtedly a very significant recruiting and retention incentive. At least a proportion of submariners join because they have some idea that

Navy risks losing not only a very important means by which the professionalism and capability of the submariners is sustained, but a significant motivational element of submarine life as well.

Aspirations must be calibrated to what is reasonable and activity levels overall must be kept in a sensible and sustainable balance, something which has not always been managed successfully. There should be a reasonable chance of every person who joins submarines otherwise there will be little to differentiate submarines from the rest of the Navy except poor living conditions and workloads that are more demanding than average. Navy must be very careful not to underestimate the importance of this issue.

7.3 LEADERSHIP

Leadership, in its broadest definition, is unquestionably a significant contributor to the current situation in the submarine community. There are many examples of the finest leadership at all levels in the submarine community. The current workforce situation is not the product of a sound leadership culture. It was as disappointing to hear one junior sailor offer the opinion without
prompting that there is a ‘crisis of leadership’ in the submarine community as it was to hear the large group present generally agree with him.

Extremes of behaviour as a consequence of fatigue have been mentioned previously in this report. There is too much evidence of this from people in command and leadership roles in the submarine community. There were many stories of aberrant behaviour that are indicative of an unhealthy culture. While it may not be widespread, the evidence suggests that the prevalence of this sort of behaviour is not well understood and is not properly managed even when it is recognised. Of serious concern too is that it ends up being modelled by others and therefore perpetuated.

Another element of demonstrated leadership practice that should be viewed with concern is the way in which people seem to react to some instances of unacceptable behaviour. There seems to be a view that when bullying or bastardisation occurs, action is only taken against the perpetrator if the victim agrees. The foundation principle of military authority that requires a senior to take action to address shortcomings in a junior seems to have developed a discretionary component. Perhaps some of the training being delivered by Navy on this subject is creating the wrong impression.

The evidence suggests that Navy has a ‘blind spot’ when it comes to managing poor leadership, particularly in officers. The current personnel evaluation system seems to be quite ineffective in alerting Navy’s personnel management system and senior hierarchy to individuals with poor leadership skills or undesirable leadership behaviour. The proof of this would seem to be evidence from many submariners that Navy has consistently appointed technically competent officers and sailors with very poor leadership and people management skills to positions of command and/or leadership where they have done serious damage to their subordinates. There is much historical and anecdotal evidence to suggest that this situation is not restricted to the submarine community.

This ‘blind spot’ leads to more serious trouble when people with poor leadership skills are collected together in even a few of the key positions in a single submarine ship’s company, or other key command and leadership positions. There are examples of that having happened routinely.

<table>
<thead>
<tr>
<th>Key Observation</th>
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<tbody>
<tr>
<td>There appears to be a pressing need for a system that reliably and formally alerts Navy to people with poor leadership skills, so that they can either be helped to conform to the standards required or restricted from leadership roles if they are unable to conform.</td>
</tr>
<tr>
<td>Navy should also make some attempt to better match personalities in key positions in a submarine, to avoid damaging impacts on the ship’s company.</td>
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Recovery for an organisation in as parlous a personnel state as the submarine arm will require the best of leadership. Even isolated pockets of poor leadership will have a disproportionately negative impact.

7.4 ‘TOUGH LOVE’

The notion that ‘submariners eat their young’ has been around for several generations. During the course of the Review this thought was frequently explored, with interesting and varied reactions from people. There were two themes that emerged very strongly.

Junior sailor submariners felt that in respect of how they were treated, and how trainee submariners generally were treated, the notion was something of a relic of times past. They appeared to be of the view that if it is still around today, the legend has been sustained by a few isolated instances of bullying behaviour. The junior sailors were the ones who were most animated on the subject and the only ones who had a cogent explanation of why they felt as strongly as they did on this issue. Others simply tended to deny that such a culture or syndrome exists.

The junior sailors observed that the treatment of trainees in particular was simply an expression of ‘tough love’ that was necessary and important. They argued along lines that supported the notion of submariners as an elite force, which was clearly how they saw themselves and wanted to be viewed by others. They considered that the trainees were privileged to be given the chance to earn their dolphins and needed to work hard and stay focussed to demonstrate that they were good enough to wear them. Above all else, they needed the trainees to prove that they were capable of winning the trust of the rest of the ship’s company that they could be relied upon in a life-threatening emergency. For the junior sailors, nothing less would suffice and if the individual was not up to that standard, it was better for everyone if they did not stay around taking up a training bunk that could be better used by someone else.

A submission from one female ex-junior sailor submariner expressed a view that is very common among the junior sailors:

“…..make sure you keep the submarine service as the elite service. It takes a lot of dedication and perseverance to become a submariner and when you do finally achieve your dolphins it is a great source of pride to become part of the silent service and to wear the black overalls. When I was leaving the service (3 years ago), there was talk of submariners changing to grey ‘talls and we were already losing special privileges such as hotel accommodation on port visits, to bring us more in-line with the skimmers. We don’t want that. We like being different. We put up with cramped conditions, lack of personal space, lack of fresh air, 6 hour watches, less shore time, more time at sea, etc. But we are proud to be submariners and we like that distinction. Don’t become desperate and let just anyone into our ranks. I know we are desperately short on numbers but that’s no excuse to relax the selection criteria. To live in a tin can with 50 or so others for more time than you are likely to spend with your
own family - you need to have a strong will to be there and the right frame of mind. It’s mostly pride in doing an exceptional job in unusual circumstances that keeps us all there (plus the extra pay helps).”

A strong theme that was common among sailors and some officers was that the wardroom often ‘eats its young’ and that seaman officers most certainly do. This is an issue that demands careful attention, to make sure that all of the nuances of the situation are identified and understood, before corrective action is considered. There does appear to be a cultural issue with some seaman officer submariners. If this were not so, the following sorts of comments, made by one young officer of seaman officers generally, would not be as common and widespread as they have been during the Review:

“Do seaman officers eat their young? Off the Richter Scale!”

7.5 PLATFORM ADORATION

Without wanting to unnecessarily risk accusations of insensitivity, it is generally accepted to be a truism that Australian blokes love their toys. The more different and ‘sexy’ they are (in the eye of the owner), the more love and attention is lavished upon them. It is probably not surprising therefore that Navy’s long, male dominated history appears to have resulted in an organisational culture that is biased towards care for the ships, submarines and aircraft, at the expense of the people.

Admittedly an intuitive rather than empirical observation, Navy’s long-standing behavioural patterns seem to demonstrate a greater devotion of management effort towards the platforms than is applied to the people. No doubt some would disagree but there is evidence to support the contention. At a very superficial level, one sees many more pictures of the ‘toys’ adorning office walls than people. Substantial management effort is devoted to recording data and tracking information to manage the platforms, their configuration, usage rates, maintenance cycles and so on. Much more detail is known by Navy about the platforms than about the people. The evidence consistently indicates that submariners comprehend this clearly. To quote one long term submariner:

“STOP saying “People are our most valuable asset”. No one believes that anymore and we have lost faith...that it is really true. If you say it you will devalue and make all you say laughable and not believable.”

As shortages of people have begun to bite hard in recent years, the focus has slowly shifted towards the people but more needs to be done. CN’s recent general message on future crewing concepts (CN AUSTRALIA Z4P/WAC/WAO 180427Z MAR 08) demonstrates this shift but it does not appear to be attracting the action required. Submariners, and most likely Navy people more generally, have been hearing the talk for a long time and, as the quote above probably suggests, are despairing of ever seeing the outcomes that live up to the promise.

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The intent here is easily misunderstood. There is no suggestion that a ship’s company should do other than lavish care and attention on their ship or submarine at least as much as they have always done. This is a suggestion that goes to the issue of role clarity and the apportionment of available effort within Navy that may result from acknowledging that the DMO has practically supplanted Navy to a large extent in the role of platform ownership. Quite clearly Navy must also maintain the wherewithal to be a well informed and appropriately demanding customer of the DMO. But platform management can be left more to the DMO and the effort and energy freed up in Navy as a result must be directed at caring for the people.
CHAPTER 8

SUPPORT

8.1 ASC Pty Ltd

A sustainable submarine workforce depends, *inter alia*, on submarines going to sea. ASC, as the generator of submarines, is therefore a critical element of the system for generating a sustainable submarine workforce. The utility of the discussion here is achieving an understanding of the capacity of the system that generates submarine platform availability.

Issues mentioned here come from many sources, however, being rightly the domain of the DMO, the depth to which they have been examined has been somewhat limited. Suffice it to say that there is a weight of anecdotal evidence and opinion but there is also scope for debate.

There are some very strong views within several areas of Defence about ASC that, right or wrong, are not productive.

Delivering the submarine capability is a function, to a significant extent, of a relationship between Navy, the DMO and ASC.

Evidence put before this Review also suggests that as an entity, Navy appears to have been either inactive in the relationship at times or to have exerted an inappropriate influence on decisions about the submarines at other times. Both behaviours can be problematic. At the very least, Navy needs to be engaged when decisions are made that directly impact Navy outputs. This clearly must be achieved without undermining the responsibility of the DMO for obtaining value for money for the Commonwealth. Likewise, DMO has not always been involved in Navy capability management deliberations, particularly on personnel issues, yet these decisions have an impact on materiel support and therefore on ASC planning and costs.

It is a big challenge for the Navy people in DMO to be Navy’s voice in the relationship, as appears to be the case now, when there are so many issues decided upon in respect of the submarines that directly impact the Navy workforce. Navy must represent itself at some level in the relationship to be able to influence, or at least be aware of and respond to decisions impacting the achievement of a sustainable workforce. The alternative is to accept
being a victim of what the other two players decide. The FEG Commander is probably the person who should play this role but he must recognise the necessity to do so in a cost conscious way.

Although a simplistic analysis with limited utility, a widely held view is that ASC has workforce capacity, in aggregate, to deal with slightly more than

ASC's workforce size is a product of how much money the Commonwealth gives the company and an assurance of a level of work they will be given. The extent to which they suffer problems attracting enough suitable people is not clear but it is not unreasonable to think the company faces similar challenges to everyone else from the skills shortages being experienced nationally.
Key Observation

The generation and sustainment side of the submarine capability is a system in balance that is producing approximately what it is currently capable of producing. This is the 'rated output' of the system. Fine-tuning will probably not change the rated output dramatically.

If Navy were to accept that a demand to change the configuration of the boats, in the way and for the reasons outlined elsewhere in this report, is the normal state, the usage upkeep cycle is extended to the degree possible, and ASC had unconstrained resources to achieve the maximum output of boats for use, the number of boats theoretically available for use from the six boat fleet would probably be...

An alternative view on this issue was that schedule delays are advised to the DMO well in advance and it is the DMO who uses this approach in dealing with the FEG. The reality is opaque but this is another indicator of the state of the relationship between the two, which underlines the need for Navy to get involved so it can form its own views and respond in its own interests. Regardless of the reality, the DMO, through the SPO that is in the driver's seat, not Navy.

An important point is that late or last minute advice of schedule slippage appears to be a common occurrence. It seriously disrupts Navy’s human resource management and impacts people in a very negative way. In respect of this behaviour there certainly appears to be a ‘blame game’ going on.
Crewing and platform availability exist in a symbiotic relationship. The FEG is where they come together.

8.2 LOGISTIC SUPPORT AGENCY - NAVY

This organisation, a DMO entity, came in for some strident criticism from several quarters. There was a view that since only of Collins Class inventory is common with the rest of Navy, a better solution in the case of the submarine force would be This is a matter for the DMO and it is quite clear that HMS is well aware of the problem and working to sort it out.

The important issue for Navy is to understand that one source of intense frustration for submariners is undoubtedly a consequence of several causal factors interacting. This is

While not squarely within the remit of the Review, this is an issue that impacts morale among the submarine workforce and to that extent it is relevant and may be worth further examination by Navy in cooperation with the DMO which is responsible for providing this support.

8.3 SYSTEM PROGRAM OFFICES

The submarine capability is supported by two SPOs, the Collins SPO (COLSPO) and the Submarine Combat SPO. Visits were made to both during the course of this review and comprehensive discussions had with both SPO Directors.

The SPOs are key players in the generation of submarines for use and there is clearly an enormous amount of outstanding work being done in both to achieve that end and improve the output. The in particular is worthy of praise for his efforts to improve submarine availability but both are doing sterling work that warrants Navy’s recognition. Continued support from Navy in the form of the highest quality people who are properly prepared for the positions they occupy in the SPOs is essential to a sustainable submarine workforce, not only from the point of view of generating submarines but also as a key element of submariner career progression. Comments on ‘Engineering in the Navy’ in Chapter 6 are germane.

While perhaps adventurous to suggest it, there appears to be logic to the notion that the SPO Directors should have some responsibility to Navy during
The forthcoming period

The actions of the COLSPO Director especially (taken on behalf of the CEO DMO) have a direct impact on the Navy's ability to build and sustain the workforce. The same is true of ASC. There is perhaps a need for Navy to have a person embedded in ASC also, for this reason.
CHAPTER 9

FACILITIES

9.1 SUBMARINE COMMUNICATIONS SHORE SUPPORT

This issue was touched on briefly in Chapter 3 under the heading ‘Geographic Stability’. There are elements of this issue that relate to the Organisation and Management FICs but the solution primarily lies within the Facilities FIC and is therefore examined here.

The majority of shore positions for CIS SM sailors are in the Submarine Communications Centre (SubCOMCEN), which is currently collocated with the Submarine Operations Room (SOR) at Fleet Headquarters (FHQ) in Sydney.

the FHQ site (SOR

and SubCOMCEN) is planned to move to Bungendore in late 2008.

While the collocation of SOR and SubCOMCEN is convenient

it is by no means essential. It is technically possible for the

SubCOMCEN to be anywhere, including at HMAS STIRLING,

The current arrangement imposes inescapable geographic turbulence for the sailors who staff the SubCOMCEN. Once in the West, these sailors do not welcome a move to Sydney for their shore respite posting, generally speaking. Indications are they are even less keen to go to Bungendore. Although different for each, both Sydney and Bungendore impose significant additional difficulties and financial burdens, especially for the junior sailors who provide the bulk of the capability.

A proposal has been around since 2003 to make the COMCEN at HMAS STIRLING

create better opportunities for geographic stability for the CIS SM sailors, who would then have more shore postings available in the West. Although the documentary evidence has not been sighted, the CN of the day has confirmed personally that he did approve this proposal but for some reason it has not been implemented. No sensible explanation as to why has been offered, nor has any cogent argument been advanced in opposition to the proposal. Anecdotally, some SubOps people have not been in favour. Noting that

the proposed rearrangement continues
to have significant attraction.
The proposal also calls for the CIO to take management responsibility for the SubCOMCEN, which is a policy that has been implemented for all other Defence COMCENs. The reason for the current arrangement of split responsibility with the SubCOMCEN remains unexplained.

The CIOG has agreed that the proposed move of the SubCOMCEN to HMAS STIRLING offers the best outcome in all respects, from their point of view. Putting it in place carries an estimated cost in the order of $100 million, which the CIO is understood to be willing to fund. An element of this cost is modification of the existing facility at HMAS STIRLING to fully replicate the capability that currently exists in Sydney. Implementation has been estimated to require approximately a year.

CJOPS has raised no objections to the proposal so long as his ability to command and control operations is not fragmented. The judgement is that the proposed arrangement would have no impact in that regard.

The solution in this case appears clear and the decision is within Navy's bailiwick of responsibility. CJOPS and CIO senior staff, the Fleet Commander and the Submarine FEG Commander have all informally expressed agreement.

**Recommendation 6**

'SubCOMCEN Location'

The proposed re-arrangement of the submarine communications shore support infrastructure and management should go ahead as soon as possible.

### 9.2 LIVING IN ACCOMMODATION

This is a significant issue for junior people, particularly given the limited onboard accommodation available at HMAS STIRLING and the tight rental market in the vicinity of the base. The normal entitlement is to live ashore in rental accommodation so most find that they are forced into the commercial rental market sooner or later. This comes as a harsh reality for many because generally junior sailors have no furniture, little money and no rental history. They find they must compete in a very difficult rental market where furnished accommodations is rare and Defence's demand for a military release clause is not welcomed by landlords or real estate agents. Movement ashore brings the additional burden of revised transport arrangements because there is no public transport service to the base and they are not able to walk across the causeway. In all practicality, when combined with the flexibility required to be effective in a submarine career, being posted to HMAS STIRLING precipitates a need for vehicle ownership.

The circumstances of minimal on-base accommodation, limited commercial rental accommodation availability of high cost and problematic base access in the West are unique and differ markedly from the circumstances pertaining at other Navy shore establishments.
Recommendation 7
'Living-In Accommodation in the West'
Additional living-in style accommodation for junior sailors in Western Australia should be procured as a matter of priority.
CHAPTER 10

TRAINING

10.1 BECOMING A SUBMARINER

The sense of much that is discussed in other parts of this Report is echoed in this chapter, which focuses on individual training.

Notwithstanding the observation by the Training Authority – Submarines (TASM) that there has been a substantial reduction in training time for all streams in the past ten years¹, becoming a qualified submariner, particularly one with technical training, can take a very long time to achieve. Therein lies a major impact on a sustainable submarine workforce planning. The existing Navy training philosophy is a ‘front loaded’ rather than a ‘just in time’ model. Some sailor categories undergo very long course sequences that can have long periods between courses. Getting to sea can take several years, by which time the sailors are usually frustrated with waiting and have forgotten a great deal of what they have learned on course because there has been no opportunity to put it into practice or consolidate.

There were many personal stories that modelled this situation; stories in which people see ineffective and wasted effort leading to inefficiency in achieving the objective. The situation also appears to have become endemic to such an extent that a specific management regime is in place to address the delays in getting trainees to sea. Those who have not started SMSQ within 12 months of completing the Introduction to the Collins Class Course (ICCC) are required to repeat that course.

This is yet another example of managing the symptoms of the underlying problem, rather than solving it, which reflects, inter alia, the disaggregated authority and responsibility among many authorities in the matrix management arrangement. It also reflects a lamentable lack of focus on generating submariners.

This issue is compounded by what has been referred to as a ‘get out’ culture among sailors, which Navy’s current policies appear to either generate or at least accentuate. Analysis of available data shows that 50% of sailors are currently leaving the Navy either at the completion of their initial minimum period of service, or at the six-year point. The evidence appears to indicate that by the time the junior sailors have served in the Navy for two years, most are thinking about leaving.

¹ This may be a result of greater efficiency. It could equally be a product of a demand to get people through the training pipeline more quickly to feed a declining workforce.
To quote the submission of one Able Seaman ET:

"I....have been in the Navy going on 2.5 years now. During this time I have not spent a single day at sea as I have been either training or awaiting further training so that I can become a submariner...... We have just been recently told that the absolute earliest we will get to sea is late October, but more likely the beginning of next year..... and that makes me past my 3 year mark, half of my minimum period of service.

I completed my ET course....early last year and it was a good eight months before I picked up a multimeter again during my ABET-SM course..... It's now been a couple of months since I finished that course and I'm having to re-read some of my books to remember how a system works....

At the end of the day I'm starting to wonder whether I made the right choice...."

This is not an isolated case. The stories of training that seems to go on forever are pervasive. Technical sailors repeatedly reported great difficulty in recalling their training when the opportunity came to put it into practice. Courses are judged by the trainees to be often much longer than necessary to cover the material adequately. There was widespread criticism of courses that run at a fixed (usually slow) pace regardless of the progress of trainees, presided over by poor quality instructors (mostly those in uniform, rather than the contractors). These issues conspire with insufficient opportunities to get through the training including at sea, even when a training bunk is available, because of the way the boats are being scheduled.

Under the current system it can take up to 12 years to generate a fully qualified Chief Petty Officer submariner. The data shows that few people are now remaining in the Navy workforce sufficiently long to achieve that level. Certainly not enough are doing so to meet the existing need if the current trend continues.

Another important issue in the training domain, noted previously, relates to civil accreditation. This is seen to be a strong retention incentive, so long as the courses provided retain relevance in the civilian workplace and are not simply attempts to get accreditation for training that equips people for roles unique to Navy employment.

Recommendation 8
‘Review of Training’

A fundamental overhaul of the current approach to delivering training should be undertaken, with a view to moving to a phased training delivery, 'just in time' model within a flexible training continuum that offers individuals some measure of choice and that leads to meaningful, worthwhile qualifications that have civilian accreditation.
There is currently a backlog of some trainees waiting to get to sea for SMSQ. As explained previously, this phase of submariner training is under a task book regime where all tasks must be done in a submarine and roughly one third (depending on category) can only be completed with the boat at sea. The target time for task book completion is 16 weeks but this is dependent on the boat’s program. The average time taken for SMSQ is currently 20 weeks.

Getting these people to sea is a function of bunk availability that is determined to some extent by the activities for which the submarines are scheduled. Whilst the submarines can carry a maximum of people for any length of time, this is currently capped at while the submarine escape and rescue system is unavailable (see the discussion in Chapter 5, ‘Major Systems’). A submarine ship’s company size varies between and depending on what the boat is doing. So the boats can carry between and trainees of all types. A balanced mix is usually sought so that the best overall training outcome for Navy is achieved.

SMSQ trainees awaiting their chance to get to sea are a significant management challenge. Notwithstanding a great deal of effort and innovation on the part of TA-SM until recent times, when the responsibility for managing these people was transferred to the FEG, one would have to conclude that the results achieved have been less than optimal. The sailors have been allocated to ship husbandry work on DMS vessels, lent to the Fleet Support Unit where there is little real work of any sort let alone for trainees, the HMAS STIRLING galley, the Submarine Response Group, or to do community work at local schools etc (recently ceased as an option, popular though it reportedly was). This considerable ongoing management effort would seem to be better spent addressing the cause of the problem, rather than managing its outcomes.

Many sailors complained that they never seem to be allowed to go to places or get involved in wider Defence activities where they might be usefully employed and develop themselves. Examples of such activities include the Commonwealth Games, APEC and the Catholic Church World Youth Day. While taking such an approach would again be directing management effort at symptoms rather than causes, as well as consuming financial resources that are clearly in short supply in the Submarine Group (discussed in Chapter 11, ‘Supplies’), it is seen to indicate an attitude to managing this fairly fundamental problem that is clearly impacting on motivation and morale, with an inevitable impact on retention.

SMSQ trainees qualify for their dolphins at a board conducted by the senior people in the submarine within which they have been training. This is clearly a source of discontent for many junior submariners, who see nepotism, favouritism, inconsistent standards and personality influences regularly at play. The senior submariners, on the other hand, are quick to defend this arrangement, which they see as the best way of doing business. There is a sense that perhaps the juniors may have a case and that the seniors have a sacred cow; that said, the evidence is not all that strong on either side and
there are many analogies elsewhere in Navy – the surface Fleet's bridge watch keeping certificate for one.

Others, such as employ a centralised board arrangement convened by a shore authority. One potential benefit of such an approach would be a consistent standard, which appears to make sense in a small force. Adopted here, this approach could remove a significant burden from the senior staff onboard the boats. A single centralised board could also provide the Submarine Group higher management with a relatively independent method of monitoring the climate onboard the boats, at a time when circumstances are such that a quick reaction to less than ideal conditions is called for.

10.2 SIMULATION

A significant capital investment has been made in simulators and emulators of varying fidelity to support system integration and testing, individual and collective training for the submarine capability. The existing systems are used for basic operator, individual advancement and team training for submariners, with varying degrees of efficacy. In the absence of sufficient funding to acquire the full suite of such systems there has been much commendable self-help applied by staff of the Submarine Training and Systems Centre (STSC) but by any measure, some of the solutions (like photographs of parts the systems being simulated in place of actual hardware) are of very poor fidelity and barely adequate for the task.

The demand for access to the systems exceeds the available time for their use and creates competition between functions, with a high level of impact on the training program, which is running well below capacity. If the throughput of trainees were to increase, the competition for simulator time would become a significant constraint on training. This issue can only be overcome by acquiring more simulation systems. However, this may lead to duplication of some systems in dedicated facilities for the SPO for systems work and for TA-SM for training. Systems in lower overall demand could be shared.

The original investment in simulation and emulation systems for both functions has not been matched by sufficient ongoing funding for maintenance, upgrade and replacement. Simulators at the STSC are generally out of date by modern standards, which limits the fidelity of training and places a higher training load on the boats than would be necessary if more sophisticated systems were available.

The fact that the 'bottleneck' for the throughput of trainees is currently the availability of training bunks in submarines is masking this issue to some extent. If the outcome of this Review is a better production rate of trained submariners from the boats (as it should be), the bottleneck will shift to simulator availability and fidelity at STSC.
The following actions are considered to be essential if Navy is to meet the training need:

- upgrade
- update
- update
- upgrade
- acquire
- acquire
- acquire

Such acquisitions would entail capital and ongoing support costs. An additional training team of around operators would be necessary for new acquisitions. They could be sourced from Service, APS or contractor resources. Platform training simulator upgrade costs will approach. Additional building facilities would be needed for duplicated systems and to allow overlap of equipment change outs so that training could continue. This would require additional resources to train the trainers, operators and maintainers of the systems. Costs have been estimated at capital over two financial years and per annum ongoing.

**Recommendation 9**
**Simulation Systems**
The proposals for development of the submarine training facilities through upgrade of existing systems and acquisition of new systems should be given priority.
CHAPTER 11
SUPPLIES

11.1 PREFACE

Comments on the situation with logistic support of the submarines in the form of spare parts, stock control and management, repairable items and related issues have been made in several other chapters, under the most relevant heading for the issue under examination. This chapter is limited to a brief analysis of the funding provided by Navy for management of the submarine capability.

Navy funding flows to the submarine capability via two routes — through Fleet to the FEG and from Systems Command to the Training Authority. Funding for through life support of the platforms is a DMO responsibility.

11.2 FLEET FUNDING

The informal assessment of the Submarine FEG Headquarters staff is that the funding situation would be comfortable if they were allocated approximately annually in 2008 dollars, assuming they are required to support active submarines. This figure also assumes that the programmed level of activity across the FEG is planned around supporting the current business model.

The FEG bid for FY08/09 was below the level of funding sought. This appears to have been a direct result of the Government's imposition on all Departments of an 'efficiency dividend'.

The frustration verging on despair that was widely evident with this outcome was pervasive. The extent to which many people in the FEG have been restricted in doing their jobs as a consequence is significant. It is also somewhat ironic that there are finance staff in the FEG headquarters to manage

11.3 SYSTEMS COMMAND FUNDING

The FY 08/09 bid to Systems Command from the Training Authority-Submarines was . The allocation was . This would represent a fairly modest shortfall on a percentage basis were it not for the fact that of the allocation is committed to contracts and there is no discretion associated with the expenditure.
Among other impacts, funding for the Submarine Careers Team (SCT – the bid was cut completely and the allocation for travel was below the bid, with consequential direct impact on the Enhanced Selection Process (ESP) for potential submariners.

Again, the submarine community expressed despair over these outcomes, passionately in a few cases because of the direct impact on their own very limited recruiting efforts, which they know to be crucial.

11.4 COMMENT

The way in which the Government’s demand for financial efficiencies has been applied in Defence appears to be the normal approach – proportionate application across all Groups (or ‘salami slicing’). This approach appears to be adopted in the expectation that the Groups themselves will somehow generate cost efficiencies that will allow them to continue achieving the same or similar level of output with less financial resources. This is simplistic and can lead to completely the opposite outcome in some cases – like the submariners.

Reducing the ESP and ceasing the SCT will impact recruiting to the submarine workforce with a concomitant impact on capability. The effect on morale through frustration among people who are prevented from doing things they know to be essential must not be under-estimated. It does impact retention, more so when all dimensions of the workforce are under the stress being experienced today. This sort of outcome has been evident time after time with Defence’s simplistic approach to finding savings.

Several officers in Navy's Senior Leadership have financial management experience in both Navy and Joint positions. By comparison with Navy, it is a fair observation, albeit intuitive, that Joint organisations generally and some other parts of Defence are more than adequately resourced, if not awash in funds and have the flexibility to manage them innovatively. In contrast, Navy struggles with a budget that is substantially tied up in a plethora of commercial contracts that have been entered into as a consequence of past higher direction on commercialisation. All have indexation provisions. Navy is therefore hamstrung with limited ability to make short-term change. The scope available to Navy for embarking on initiatives with financial implications is severely limited as a consequence. The example of Navy’s new operational uniform, the Navy Disruptive Pattern Uniform (NDPU), is a case in point. That fact that Navy had to commit all of its Minor Capital funding for three years to achieve that outcome is astounding.

Finding that money within Navy’s current allocation will be very difficult while elsewhere in Defence, underspends are building up, as usual.
The evidence exists that Navy's budget requires re-base lining. A comparison across Defence shows, *inter alia*, that compared with the rest of Defence, Navy has:

- constrained funding across all expense categories,
- the second lowest level of Supplier Expenses per-capita,
- the second lowest level of domestic travel per-capita,
- the equal second lowest overseas travel per-capita,
- the lowest training cost per-capita, and
- the lowest removals costs per-capita.

**Key Observation**

Additional funding will be required to implement the recommendations in this report, should they be agreed. Navy's budget, which appears to be constrained below the minimum requirement and lacks the flexibility of a significant discretionary component, will probably not be sufficient to initiate, and more importantly sustain, the very different way of doing business that will be required for a sustainable submarine workforce.
CHAPTER 12

CREATING THE EFFECTS AND OUTCOMES REQUIRED

12.1 REVIEW OF THE SITUATION

From a platform perspective, it is fair to say that the RAN's submarine capability has never been better. The Collins Class submarines are assessed by those who know about such things as being as good as any large modern conventional submarines in the world.

To achieve and sustain a recovery of the people FIC of the submarine capability, there is a need for corrective action that targets:

- considerably improved and sustained retention;

- consistently higher recruitment to the submarine force, at junior level and at higher rank; and

- prevention of this situation developing again.
A clear statement of intent\(^1\), with behavioural guidelines, limitations and the objectives to be achieved will be a very important first step in setting this program in motion and getting all contributing stakeholders pulling in the same direction. Clear and unambiguous statements from CN will be needed, for the submariners and the rest of Navy. Such statements must describe what the submarine force will and will not do while \(^1\) These will need to be carefully crafted, distributed thoughtfully and absolutely adhered to.

Someone will need to be put in charge of delivering the intended outcome and must be given the wherewithal to make it happen. The associated chain of command through which that person will work will be very important. There must be no scope for obfuscation or other agendas to interfere unless CN agrees. All other Navy senior staff must understand clearly that on this matter, he is the ‘supported commander’ in a doctrinal sense and they are all ‘in support’.

<table>
<thead>
<tr>
<th>Recommendation 11</th>
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<tbody>
<tr>
<td>Clearly assign responsibility, authority and accountability for: preferably to one person who has no other responsibilities. He should be directly responsible to CN, through DCN.</td>
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<tr>
<td>Once the recommendations to be acted upon are decided, a campaign approach should be adopted which must include consultation with submariners and a carefully crafted information strategy for advising the Government, senior Defence leaders and the wider Navy community.</td>
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From among all of the recommendations in the report, it is logical to first put in place the structural changes needed to prevent relapse because these will be fundamental to sustaining a positive impact on retention over the long period \(^\) The proposed timelines with each recommendation have this thought in mind.

\(^1\) The decision on who makes this statement is very important. On balance, given the strategic implications, a low key statement may be best. There would be risks if CDF or the Minister chose to be involved. It must, however, be sufficient to get Navy aligned.
The image of the submarine arm has to be changed. Recruiting from within the Services, mostly Navy, will be essential but should not be expected to improve much before the issues that are seen to be driving the submariners out are addressed. Only then will potential submariners be likely to begin to believe that the disincentives to service in submarines are being corrected.

Quickly addressing those elements of the submariner culture that need to be discarded will be vital. If not addressed, these will limit the potential benefits of organisational and other changes.

12.2 THE OUTCOMES REQUIRED

Apart from the recommendations made earlier in the report, there are several domains within which outcomes must be achieved or effects created. This Chapter identifies the options for achieving the outcomes or effects suggested and the recommended courses of action.

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<thead>
<tr>
<th>Key Observation</th>
<th>The domains within which outcomes must be achieved or effects created are:</th>
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<tr>
<td>Life and Work Balance</td>
<td>- reduced workloads, and</td>
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<td></td>
<td>- assured respite and better predictability.</td>
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<tr>
<td>Support for Individuals</td>
<td>- career management arrangements, and</td>
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<td></td>
<td>- assessment of leadership and interpersonal skill.</td>
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<tr>
<td>Organisation</td>
<td>- senior submariner expertise in Canberra,</td>
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<td></td>
<td>- junior technical sailor employment, and</td>
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<td>- the submarine capability as an elite force.</td>
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12.3 LIFE AND WORK BALANCE

The Review has concluded that the most significant issue having negative impact on retention and therefore a key plank of a sustainable submarine workforce is the inability of submariners to achieve assured respite, in the short and long terms, from the rigors of life at sea in a submarine. Of almost equal importance is that submarine sailors are unable to plan their lives with any confidence.
because of volatile programs, which renders futile their attempts to achieve a balance between their life and work demands.

Navy must give submariners assured respite. **This is an important safety issue**, as much as anything else. Greatly improved predictability is also needed, so that they can plan their lives with greater certainty than is possible today. This commitment must be delivered on reliably and consistently from the outset. Achieving this outcome will demand several changes in a range of areas.

### 12.3.1 Workloads

The submarine crewing and support paradigm must be changed to shift part of the current burden of ancillary **duties** from the existing ship’s company members to specialists who are trained for the roles. As a minimum, stores accounting, public funds management, personnel movements management, unit personnel administration, correspondence and secretariat functions should be handled by specialists.

The options for achieving this are to either:

- **establish** a support cell ashore that provides a service to all crewed boats by undertaking these tasks on their behalf; or

- **embed** a support cell in each submarine ship’s company. This latter model would necessarily require that some of these people would not always go to sea with the boat thus **shore** facilities would need to be assigned to each ship’s company for them to work in.

Either model could lift a significant burden of work from a submarine ship’s company. The first option would likely involve fewer people overall, which suggests it as the preferable option from a cost perspective. The second option would have less tangible benefits arising from the people belonging to the ship’s company ‘team’ although they would not need to be trained submariners. They could go to sea from time to time if required, as could those in the centralised **model**. In either case, some recruiting benefit may accrue as those in such roles are exposed to submarine life and would help the submariners adjust to having non-submariners among them as a matter of course.

The ship’s company needs external support in several **other forms** to reduce workloads to a sensible level – **routine** watch-keeping, embarking stores, communications **guard**, maintenance and defect rectification - when the boat comes alongside, so that they can gain short term respite and enjoy some recreation.
Indicatively, the objective would be for all ship's company members to be able to achieve a break of two continuous days after periods at sea exceeding a week and three days for longer periods, before being required as duty watch or to undertake other work onboard outside normal working hours.

Outside the period of their continuous break, a duty watch ratio no worse than one duty every five days should be aimed for. Ideally, a submarine ship’s company should not be required to carry out force protection duties.²

Some elements of this outcome could be achieved by selectively employing commercially contracted services. Discounting a wholly contracted commercial option as being unlikely to meet all elements of a foreseeable statement of requirement, options for achieving this outcome are to either:

- increase the size of the ship's company of the submarine to facilitate the approach outlined, flying in as required those people needed to achieve the outcome; or

- fly in an external support team tailored for the task (from the Submarine Response Group [SRG] for example, the organisational structure of which would need to be redesigned with this function in mind).

Modern conditions of employment against which Navy must compete for people lead to the conclusion that in the longer term, once the submarine workforce is stable and sustainable, the objective should be to move to a multi-crewing model. Navy's own experience, most recently with the Armidale Class Patrol Boats, shows that this can work and is attractive to people once they get used to it. A fly-in, fly-out model could give people choice about where to live that would have some similarities with conditions offered in the commercial world. This could help address some of the issues associated with the submarines being based in Western Australia.

The ideal would be dual-crewing the submarines but the considerable extra personnel cost such a model entails would only be worthwhile if the current availability of the platforms was higher than is currently achieved. With current availability rates, three crews to two submarines offers the most cost-effective balance. This is an arrangement which is working satisfactorily with the hydrographic ships and that has been found to work best with the patrol boats.

² This could be seen to be applicable to all vessels with similar sized ship's companies or those designed on minimum manning principles. Force protection imposes a very significant additional duty watch burden on individuals in such platforms. Perhaps Navy should consider creation of a dedicated force protection capability that is properly trained for the task, in the way that the RAAF has Airfield Defence Guards.
Recommendation 12
'The Goal'

The mid-term goal for crewing the submarines, once the workforce situation has been stabilised and numbers allow, should be to flexi-crew on the basis of three crews per two submarines.

Noting the current workforce situation, the time when the submarine capability might be in a position to move to this crewing model may be some time away but that should not stop it being adopted as Navy's planning baseline and stated as the long term goal. Having a goal of this nature should help change the image and encourage recruiting, as people see commitment to modernising work practices in line with what is happening elsewhere. A decision on later recommendations concerning the submarine Scheme of Complement (SOC), which is also in need of revision, would give a reasonable basis on which to assess what an achievable date for this goal would be.

With the average number of submarines currently generated being such a flexi-crewing arrangement may appear neither simple nor elegant. However, if three crews were based in the West to run two boats and, in time, a fourth crew was based in the East, the overall situation would change to Navy's benefit. Managing such an arrangement has to be carefully thought through. Existing submariners should be the given the first opportunity to serve in a Sydney-based crew but the longer term objective would be to tap recruiting potential in the East. Eventually, more crews might be East based than West.

Recommendation 13
'A Sydney-Based Submarine Crew'

A study should be conducted to ascertain the management issues, cost and viability of sustaining one submarine crew based in the East. If this appears to be a potentially viable a trial should be conducted once three sustainable crews have been established in the West.

The study could be scheduled for early in 2009 and could be undertaken in conjunction with a comprehensive, Defence-wide publicity campaign to promote the new organisational arrangements and submarine capability reinvention program with the stated intent to investigate remote crew basing.

12.3.2 Respite and Predictability

Since the doctrine of op reliefs is one of the major causes of incursion into respite, with the resultant impact on predictability in the lives of those targeted, steps must be taken to cease this practice to the greatest extent possible. For
this outcome to be achieved and sustained, whatever is done must be unequivocal, not open to unnecessary interpretation or negotiation and workable in the face of normal factors of life such as sickness, injury and compassionate issues.

A system in which there can be no recourse to using op reliefs is not feasible. There will always be occasions when some key member of a ship’s company becomes unavailable at a time when program flexibility does not exist. Furthermore, there are those who choose to be available as op reliefs for personal reasons and some accommodation should be made for them in the solution to this issue, in the interests of continuing to provide the submariners the choices they find attractive today.

The priority must be on guaranteeing all individuals the optimum level of respite, while offering the option to voluntarily forego some part of that right under some circumstances. The guidelines must be sufficiently flexible to provide choice while also ensuring Navy meets its duty of care that all submariners take adequate respite. These guidelines must be carefully designed with the assistance of advice from health and social science professionals specialising in the fields of human factors and fatigue and with input and data from the submariners:

**Recommendation 14**

*Respites Guidelines*

Strict guidelines on minimum and optimum respite and maximum allowable continuous sea service should be developed, in consultation with the submariners and health and other professionals.

The Deputy Fleet Commander may be a suitable person to charge with this task, which should begin immediately and be completed as soon as possible. The submariners should be involved and have a fair say but they should not lead or have a power of veto. The guidelines should be approved by CN in CNSAC and should ideally be in place by the time submarines begin running in 2009.

If this initiative is to be successful a different operating and support concept will need to be adopted or the guidelines will be unlikely to be adhered to.

The organisational options for contributing to this outcome, once guidelines are established, are to either:

- mandate that the practice of using op reliefs cease or be limited to volunteers only, which is unlikely to be a practical solution for many reasons, such as existing shortages, human nature and the existing culture;
• establish a pool of people ashore whose role is to meet the demand for op reliefs; or

• redesign the submarine SOC so that it has an allowance of people above the minimum required to operate the boat in those areas where the current design is fragile and prone to failure.

The pool of people ashore could be achieved by redesigning the SRG to meet this objective. This model would be likely to require the smallest number of people and is attractive from a cost perspective for that reason. It would be attractive if op reliefs were drawn only from the pool because the submariners in it could be certain that they would be called upon, without knowing when, and those not in the pool could have confidence they would not be called upon. Given the inherent lack of predictability of the pool concept for the people, setting conditions of service to make such a posting attractive will prove challenging.

A redesigned SOC that builds in op reliefs is attractive for reasons of team cohesion and ‘cap tally’ loyalty, among other things. The concept is similar to the model used successfully in the frigate flexi-crewing trial, but expanded beyond just junior sailors. It would necessarily require that some of these people would not always go to sea with the boat, so permanent office facilities ashore would be needed for the ship’s company. While ashore, the ‘extras’ would need to be properly employed, led, overseen, managed and administered. The biggest attraction of this model is that it could be used to address the attributes of the current SOC that make it unsustainable, those parts of the current design where, for example, one position in a category exists in each of the Able and Leading Seaman and Petty Officer ranks.

The Director of Navy Workforce Planning (DNWP) was tasked with producing a SOC designed to be structurally sustainable. Support from DSTO was engaged and the work was undertaken in collaboration with the Submarine FEG. The outcome of that work, at Annex B, suggests that with an additional people, which includes the addition of a rudimentary Supply Department as part of the ship’s company, the submarine SOC would be structurally sustainable in terms of being able to grow sufficient people from the junior ranks to meet the demand for people in higher rank positions.

If adopted, this model would work best were the extra people to be full members of the ship’s company, as was the case in the frigate flex-crewing trial concept. It would be important that Commanding Officers understood the need to develop all members equally, not take a ‘first and second eleven’ approach. The performance of Commanding Officers would need to be assessed on the basis of how well they did that.
The conclusion from the foregoing discussion is that an enhanced SOC is attractive for some reasons and a shore-based support group for others. A combination of the two approaches may give the best outcome. Such an approach would extend organisational change widely across the FEG and in doing so involve many more people who would have the chance to see that the outcome could be attractive and serve the interests of most.

If the model was managed so that trainees were able to graduate into billet positions in the same ship’s company they qualified with, the conditions would begin to be set where diminishing experience could be addressed as the ‘pull through’ of people slowed, which it inevitably would. Combining this with a different approach to programming would assist.

If Navy shifts its focus away from scheduling boats (more under the DMO’s control than Navy’s) to scheduling crews in preparation for flexi-crewing by the three crews to two boats model, several potential benefits emerge that would assist with creating a sustainable workforce. What is envisaged here is a crew program cycle, during which the crew would move through a continuum of activity designed to meet operational requirements as well as devote effort to training and recruiting (recalling the Sea King model and the need to apportion significant time and effort to the generation of submariners). An indicative activity continuum for the life cycle of the crew would have the following four main elements:

- licensing trials, shakedown, work up and unit readiness assessment, all programmed at no more than a moderate tempo to allow for the inevitable defects and program disruptions; then

- a period at higher tempo when the boat is scheduled to meet exercise commitments and do training, at the end of which it should be a well worked up team in a boat with the ‘bugs’ worked out, by which stage both crew and boat are ready for;

- a period of operational activity or availability; followed by

- a period of lower tempo devoted to visiting Australian ports for recruiting and public relations activity and dedicated training with a focus on generating more submariners.

The crew would be formed so as to be assigned to a submarine at the beginning of its post-docking cycle and should ideally stay together to the maximum extent achievable throughout the cycle, rather than being subjected to Navy’s traditional ‘trickle posting’ regime. The model would give ship’s company members’ enhanced predictability as well as variation in their program.
Once the period between submarine dockings has been successfully extended to years, this broad approach should still apply, thereby minimising the potential need to move crews between boats with the attendant need for additional individual and collective training caused by the fact that the boats are different from one another in some significant ways. Extending the crew cycle and postings to years would have the added benefit of slowing down the churn that exists today. In this arrangement each of the four elements of the cycle would be nominally long with periods of respite for the ship’s company programmed in the FAS.

The senior members of the ship’s company might remain for a single cycle before a follow-on posting, while junior sailors might remain posted to the same ship’s company for two cycles. This arrangement would reflect the fact that Navy has very few jobs ashore that are well matched to the skills of junior sailors and that provide productive work for them. Navy really employs junior sailors to be in seagoing billets and as a basis from which to develop senior sailors, for whom productive work ashore does exist. The model proposed would enable junior sailors to get their respite and advancement courses while posted to a seagoing ship’s company.

An alternative suggestion, to dedicate a boat to training for the sake of generating submariners, is less attractive than the model outlined above. As many submariners admitted, being dedicated to the training role alone is not satisfying for long. In Navy’s culture a ‘training ship’ conjures up images from the past of ‘clapped out’ old ships masquerading as warships, filled with second eleven people whose life is spent wet-nursing trainees while conducting boring programs. This is a very unfortunate image of the vital training function which may not be an entirely accurate depiction but it does appear to exist in the Navy psyche to some extent.

Addressing the SOC first:

**Recommendation 15**

"Enhanced Scheme of Complement"

An enhanced submarine Scheme of Complement should be introduced based on the work undertaken by DNWP and DSTO. How it would be managed would need to be worked and agreed, and operating budgets developed. It should incorporate a small Supply Department, including a junior Supply Officer.

**Recommendation 16**

"Revised Scheduling Model"

The boats should be programmed along the lines of the four part cycle described.
Although effectively trials, neither should be publicly referred to as such because there is a ‘trial weariness’ in evidence. People want to see Navy get on with it. Both activities should run concurrently for one program cycle, at the end of which a formal review and report, with proposed changes, should be presented for CN’s approval through CNSAC.

Depending on the availability of people, different designs of SOC could be considered in each of the available boats. The SOCs should be developed by DNWP with assistance from DSTO, in close consultation with the submariners.

The schedule model should be developed by Fleet planners in close consultation with the submariners but without deviation from the focus or sequencing of the four key elements, each of which should be about equal in length.

The FEG Commander should decide which submarine should be chosen for the trial, which should begin as soon as practicable. Individual posting action will be needed and people must be given proper notice unless this unduly delays the start. If long delay looks inevitable, volunteers should be sought.

The other important element of this package is the shore-based support group.

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**Recommendation 17**

Enhanced Submarine Support Group

The existing Submarine Response Group should be evolved into a Submarine Support Group (SSG) that would provide the balance of people, above the additional ship’s company members in the Enhanced SOC, to provide ‘fly-in, fly-out’ support to submarines alongside away from home port, so that the respite guidelines can be met.

The SSG should be based on the SRG but would need to be larger with more capability so that, together with the additional people in the enhanced SOC, it could meet all routine demands likely to be made by a submarine alongside, including force protection. The SSG should be the ONLY place from which op reliefs should be allowed to be sourced and then only in extremis. This is vital if people are to have faith that they can get assured, longer term respite from sea service in those billets outside a ship’s company and the SRG, remembering that the objective is to make the practice of using op reliefs an option of last resort, not the default approach that is current practice.

Clearly the people for a larger SSG will need to be grown over time but this additional workforce and structure will be necessary to support the revised submarine operating and support concept that must be put in place to make the proposed respite guidelines work. The extra workforce will also be needed to support the enhanced SOC from a structural point of view.
A crucial issue is deserving of clarification and reiteration here.

Key Observation
The existing submarine SOC is not sustainable, which is one reason for the current workforce difficulties. This situation has driven behaviour that compounds the problem. The submariner culture fuels that behaviour. The causes are unsustainable structure and culture, the effect is destructive behaviour. Both causes must be addressed concurrently.

The implication that must be understood is that an enhanced submarine SOC may lead to a larger submarine workforce structure if the workforce is to be sustainable. This must not be seen as being an exercise in shifting billets around and staying the same size overall. The total size of the workforce required would ultimately be driven by the ‘final’ design of the enhanced SOC (as informed by experience), the number of ship’s companies of that design Navy decides is required and the share support elements (STSC, SAERC, FEG headquarters and so on). Intuitively, it may not need many more positions that today.

Recommendation 18
'Revised Submarine Capability Workforce Design'
A revision of the design of the Navy-owned components that support production of the submarine capability should be undertaken, based on experience gained using the Enhanced SOC, revised scheduling model and Enhanced SSG approaches.

The final element of creating the required outcome in the respite and predictability domain relates to accommodation for a ship’s company when the boat is alongside away from home port. This has been highlighted as a significant source of dissatisfaction and impact on respite. The assessment from the Review is that the dissatisfaction is justified. It is an important issue that must be addressed.

When a submarine is alongside away from home port, ship’s company members should live ashore in good quality accommodation with a reasonable standard of comfort, without unnecessary rules that restrict their freedom to relax in privacy, in the way that any off-duty ADF member generally can.

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3 This would probably be no more than three, possibly four, on the basis of earlier discussion. The best outcome might be three crews in the West and one based in the East. The current structure contains makes no sense and gives an incorrect view of the real size of the overall shortage of people as a result.
Accommodation should be located so that access to recreational facilities can be gained with reasonable ease and no great additional cost to the individual. Service accommodation should only be used when it meets these criteria, the priority being to achieve a proper quality of respite for the submariners, not to save money. This is a safety issue. There is an inherent danger in raising the spectre of affordable safety.

**Recommendation 19**

*Alongside Accommodation Standards*

Values-based guidelines covering the style of accommodation for a ship's company when a submarine is alongside away from home port, along the lines described, should be developed and applied.

These guidelines should be developed by DGNPT with submariner input. The cost will need to be accurately estimated taking into account the revised scheduling model and some changes may need to be made to existing regulations. The objective should be to be operating under the new guidelines by the time submarines begin running in 2009.

### 12.4 SUPPORT FOR INDIVIDUALS

#### 12.4.1 Career Management Arrangements

A different approach to managing the careers of submariners is required, particularly in the case of officers.

Three broad options appear to exist. At one extreme of the spectrum is to do it all for them from the career management agencies in Canberra, with no controlling influence from the FEG – a 'Canberra control' model. The other extreme is to let them do it all themselves without any central intervention. This requires clear policy and governing regulations and appropriate staffing – the 'FEG control' model. Between these two lies a range of possible functional combinations wherein the roles are shared between the FEG and Canberra – a 'cooperation model'.

The current arrangements appear closest to the 'Canberra control' model. This is the result, in some part at least, of past dissatisfaction among Navy's senior leadership with some poor personnel management practice by FEG staff which, it must be noted, was not staffed to do the job properly. Without apportioning blame, today's arrangement is apparently not working very well, to the great frustration of the submariners. Previous plans to ensure that submariners are embedded in the career management agencies, especially DNOP, have not been consistently enacted because of shortages of people.
A middling option was in use in the days of the Squadron at HMAS PLATYPUS, wherein the plans were made in consultation (to an extent) with the submariners concerned by senior staff in the Squadron headquarters. The decisions were 'sanctioned' and published from Canberra. Those who remember this arrangement mentioned good and not so good aspects of how it worked in practice but on balance, when compared with today’s 'Canberra control' model, it appeared to have more devotees than critics.

A version of the 'FEG control' model is used by RAAF, who delegate to the FEG headquarters staff authority for all posting action that is internal to the FEG. FEG staff are empowered to manage promotions as well, up to a point, under suitable regulatory control and central oversight. There is merit in this model from several points of view, although the RAAF’s experience suggests there are devotees and critics. A key to success would be a properly staffed HR management cell in the FEG headquarters.

Given the current level of submariner dissatisfaction, which suggests a strong need to engage closely with them in the interests of fostering retention, devolving a number of career management functions to the waterfront makes some sense. The guidance under which such a cell might operate should perhaps tend more towards a values-based approach, rather than being strictly governed by rules and regulations because the needs of the individual should now take a higher level of priority, compared with those of the Service, than appears to have previously been the case. This should probably not be stated publicly as the aim. There will always be those who will take advantage of a circumstance for their own ends but the submariners, all volunteers, are in a situation which appears to warrant some trust from Navy, especially if their trust is to be gained in return.

An HR cell of the type envisaged could be established around the existing Submarine HR Cell but would need to have more staff in order to cope with a substantially larger task. It should not be staffed solely by submariners but should probably be run by one. A Commander would be about the right level of experience and maturity. It should manage both officer and sailor careers, with fairly liberal but clearly defined role boundaries and it should be fully empowered within those boundaries. Akin to the observed malaise in aspects of Navy’s safety management, the HR Cell must do far more than just administer; the HR Cell must seek to actively engage and manage people’s careers to change and achieve beneficial outcomes.
Recommendation 20
‘Devolved Submariner Career Management’

Career management of submariners should be devolved to the Submarine FEG and undertaken by a new cell staffed properly for the purpose. It should be responsible to DGNPT for complying with the necessary regulations and responsive to the Submarine FEG Commander.

Plans for this devolution should be made jointly by DGNPT and the Submarine FEG Commander and be agreed by CN in CNSAC. The target for the new arrangement to be up and running should be no later than the middle of the second half of 2009.

12.4.2 Assessment of Leadership and Interpersonal Skills

There is a pressing need for a system that reliably and formally alerts Navy to people with poor leadership and/or interpersonal skills. There was much evidence placed before the Review that led to this conclusion.

The current personnel performance appraisal systems for officers and sailors do not serve the need well and have probably passed the point of needing to be replaced. In the case of the submariners the need is urgent because it is quite clear there are submariners in positions of power who are causing damage and having a negative impact on retention through poor leadership and interpersonal skills.

As emotive a subject as it is, the method for approaching this issue with the greatest potential for success would be to establish a 360 degree reporting system.

Previous Defence practice with this type of system is a poor benchmark and should not be copied; however, this should not be allowed to stifle the adoption of this approach. Many large companies successfully and beneficially employ this performance evaluation methodology and there are good systems in existence, which, if administered diligently, could materially assist with what is a very serious problem. It is approaches such as this that are required in order to restore any faith that Navy is truly serious about adopting the best of accepted modern leadership and behaviour. In the submarine community that faith is in very short supply.
The introduction of such a system should be a high priority. A target date no later than mid-2009 should be set for reporting to begin. The assistance of external expertise in this field should be sought in selecting and setting up the system. DGNPT should take the lead in this work but should not administer the system during the trial.

To be crystal clear, such a system must have the impact of convincing people at all levels that Navy is serious about changing behaviour. The reports made under this system must be attributable and made available to the senior hierarchy for promotion and other career advancement purposes, as is the case with the system in place today. It must be a system that empowers Navy to advance the people who have the required leadership attributes and identify and help those who do not.

The Seaman Officer Mentoring Program could provide a worthwhile model on which to base a program of coaching and mentoring in the first instance but counselling and training programs will also be needed and must be ready when the trial begins.

12.5 ORGANISATION

12.5.1 Senior Submariner Expertise in Canberra

The issue of senior operational submariner expertise in Canberra is a matter for judgement. On balance, there would appear more to recommend it than not. The question then becomes how best to achieve that outcome, at what level and where best to put the person to achieve the objective (which must be defined). Some express their proposals and arguments energetically on this question but none seems more compelling than any other. No one has been able to articulate clearly what the ‘day job’ of such a person might be.
Experience suggests that simply mandating a senior submariner presence in Canberra and leaving the ‘why’ and ‘how’ to the career managers will most likely fail.

Without having done extensive study of this issue, the most sensible options for locating a senior submariner (and addressing the ‘why’ options) appear to be:

- Capability Development Division, with a primary focus on the Collins Class Replacement but with direct access to CN;

- Navy Headquarters, working to DGNCPP but with direct access to CN; or

- Systems Command, in one of several domains that might include close involvement in supporting the program resulting from this Review.

Each of these suggests a person at Captain rank, which appears about right (the ‘who’). At this level the strong advocacy required should be possible and there would be useful career development opportunities for the right individual. Once the question of a replacement submarine is clarified, new demands for senior people will quickly emerge and Navy will need to be prepared.

The related question is whether the FEG needs to be commanded by a Commodore. For the next few years the current FEG Commander should maintained at the FEG to focus on leading (as previously recommended). Thereafter, a FEG Commander at senior Captain rank may suffice. This would open up the Commodore position in Western Australia to the wider Navy, which could have benefits. If this position was to become the Deputy Fleet Commander (West), with direct chain of command authority over the Submarine FEG, some additional benefits may accrue.

**Recommendation 22**

'Senior Submariner Positions'

CN might consider appointing a senior Captain in command of the FEG once the rebuilding program is well underway and, in conjunction, consider the placement of a submariner Captain (or Commodore) permanently in Canberra and the broader command and control ramifications that might flow from those decisions.

12.5.2 Junior Technical Sailor Employment

Navy must change the career pattern for junior technical sailors. Contractor maintenance will not go away and avenues for providing the sailors with
development opportunities and satisfying work must be created to accommodate this fact. Past proposals that have attracted Navy strategic leadership support, but on which little action appears to have been taken, must be pursued with energy and urgency. In particular, the concept of embedding junior technical sailors within original equipment manufacturers’ (OEM) representatives in Australia, or with contractors maintaining Navy equipment and system must be actively pursued.

Experience suggests that on those isolated occasions where such an approach has been employed it has been successful in achieving the objective of ‘up-skilling’ our people and has not justified the apparent fear that the sailors will not want to come back to Navy. In fact, from evidence put before the Review, the opposite is the case.

Navy must be prepared to lose some people through such a scheme but the assessment is that the combined effects of:

- demonstrated willingness to develop people in line with the practices for their civilian counterparts,
- recognition that doing this is not achievable within Navy’s current structures, and
- a demonstration of trust in the loyalty\(^4\) of its people

will win more support, enhanced loyalty and longer term commitment from the sailors than it would be likely to engender opportunistic behaviour.

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**Recommendation 23**

*Junior Technical Sailor Careers*

Junior technical sailor career patterns must be redesigned to remove the jobs that are unsatisfying because they do not enable skills enhancement. Action is needed urgently to enter into arrangements for embedding with contractors and OEMs.

This may be a worthy first task for a **full-time** Chief Naval Engineer.

\(^4\) One could suggest this is ‘walking the talk’ – a Navy value is loyalty but the organisation that demands it often behaves with little belief that it will be delivered and so seems disloyal itself.
12.5.3 The Submarine Capability – an Elite Force?

Ass mentioned in Chapter 6, the demise of ‘The Squadron’, as it was when the submarines were based at HMAS PLATYPUS, is lamented by older submariners for many reasons. All seem to accept there were aspects to the arrangement that were very sub-optimal but on balance, the good outweighed the bad and contributed powerfully to the submariner ethos and esprit de corps, which were important components of the attraction of being a submariner. This is an issue that warrants further examination and better understanding, in the context of consciously deciding whether to exploit the potential that exists for recovery in the notion of the submarine force being explicitly promoted as an elite Navy force.

Recommendation 24

‘An Elite Submarine Force?’

CN might consider engaging a wise old non-submariner to undertake a short study of whether and in what ways Navy and the submarine force might benefit from deliberately promoting submarines as an elite Navy force.

The importance of this recommendation should not be underestimated. The psychological effects at work can be very powerful and productive if properly harnessed. This notion is not risk free and would need to have carefully considered control mechanisms to keep it from extremism.

12.6 RECRUITING

Navy must become much more actively involved and aggressive in recruiting submariners, especially from among in-Service and ex-submariner communities, if a sustainable submarine workforce is to be achieved. A coordinated, whole of Navy approach and campaign on internal recruiting is called for, which must involve submariners but which must not be left to them alone. It should be a permanent part of Navy’s ‘business as usual’, so that the organisational focus on submariner recruiting is never lost.

Navy needs to decide what direction it wants taken on direct, directed and semi-directed recruiting to the submarine force on the basis of the evidence of achievement so far, then robustly enforce the decision. These schemes appear to have lost management focus.
Recommendation 25
‘Submarine Recruiting Task Force’
Establish a Submarine Recruiting Task Force (SRTF) to:

- develop and run a recruiting campaign,
- promote close engagement and cooperation with DFR, including the provision of submariners to assist in their recruiting efforts,
- undertake aggressive recruiting activities across the Australian Defence Organisation, and
- establish targeted ongoing communication with ex-submariners.

Among any other ideas that may emerge, the SRTF should develop and run publicity campaigns internal to Defence and examine the value of establishing permanent submarine career advisory shopfronts at HMAS CERBERUS and a convenient location in Sydney, as a minimum.

An SRTF would indicatively require approximately 12 people in the first years of its life and approximately six in the mature state. They must be the best people for this type of work, with outstanding presentational and interpersonal skills. Most should be submariners, especially those who will interact with potential recruits. The task force should be headed by a Commander, who should be responsible directly to the Submarine FEG Commander. It may need to be split between the East and West coasts.

If agreed, the SRTF should be stood up as a priority and no later than mid-2009. Its activities should be carefully harmonised and coordinated with other activities recommended here, which is why it should work directly to the FEG Commander.
CHAPTER 13

ADDITIONAL OBSERVATIONS

During the course of the Review a number of issues came to light that, although perhaps not directly impacting a sustainable submarine workforce, were nevertheless seen as relevant and worthy of further consideration within the context of the Review.

13.1 SUBSAFE

While perhaps a satisfactory system for what it was designed to achieve, the RAN SUBSAFE program is primarily focused on assuring the materiel integrity of equipment on the SUBSAFE boundary that keeps the submarine safe from flood. SUBSAFE has no routine interest in issues relating to human factors, for example, or anything else not related to keeping the water out. Apart from this issue, it examines matters referred to it but it is not a pervasive safety framework beyond that limit.

On close examination it is hard to escape a sense of significant unease about SUBSAFE, a system Navy holds to be best practice. Any belief that it compares favourably with the military airworthiness framework is misplaced, notwithstanding that perhaps it should be able to compare well. While based originally on a part of the US Navy SUBSAFE System that emerged as a result of the USS THRESHER loss, the RAN system is nowhere near as extensive or inclusive.

It is probably fair to say too that the RAN’s SUBSAFE System has declined in reliability, integrity and effectiveness, to the point of being a shadow of what it once may have been and probably should be. It has not kept pace with changes
in community standards on safety generally as they have evolved over the last decade. There are several reasons for this opinion.

A critical examination of the policy and procedural documentation, ABR 6103, shows that the descriptions of responsibility relate to chain of command not obligations and authority to act. The necessary associated accountability is not clearly defined. To be blunt, all the publication appears to be useful for is gaining an outline understanding of the Australian legislative framework governing occupational health and safety, and a more detailed understanding of how to conduct a hazard risk assessment, but not much more than that.

The organisational framework and staff arrangements within which SUBSAFE operates suffers from staff shortages like everything else in Navy. By design, and for reasons of independence (and bringing an extra set of eyes to the problem, which is probably more important), there are two important entities operating within SUBSAFE. One is the Director of Navy Certification - Submarines (DNCSM), the other the Executive Director (ED) of the SUBSAFE Program. The DNCSM is a position for an Engineer Commander. The establishment is a staff of five whose main role is conducting compliance audits to give assurance that the SUBSAFE procedures are being complied with. ED SUBSAFE is a submariner Commander whose role is to independently oversee and manage the SUBSAFE program.

Today, the DNCSM and ED SUBSAFE positions are occupied by the same person. DNCSM has two staff, not the required five.

Given this situation, and noting comments in the recent report of the due diligence review of major fleet units on safety management, the conclusion is that with respect to submarine operations at least, Navy administers the safety system but does not rigorously manage activity to assure a consistently safe outcome. There is an important difference.

This situation is one reason for the concern expressed in Chapter 2, ‘The State of Play’ about a looming organisational accident.

**Recommendation 26**

‘Review of SUBSAFE’

The SUBSAFE System should be subject to independent review and thorough overhaul to bring it into line with contemporary safety management standards and ensure it is effective across an appropriately wide scope of the whole submarine capability, rather than being restricted to watertight integrity of the submarine.
13.2 THE DEFENCE BUSINESS MODEL

Defence’s organisational and business model post the Defence Reform Program comprise a matrix arrangement where control, responsibility and accountability are disaggregated. It is a very complex arrangement that guarantees a multitude of boundary management challenges that must be overcome if almost any outcome is to be achieved. It is a system which demands that those organisations cast in the role of support or service provision not only understand that fact but know how to act accordingly. The experience of the last decade shows strong evidence that much of the available human effort is expended in managing across the boundaries, not addressing the real issues.

Since there appears to be no likelihood of changing too much of the current structure, Navy must learn to do better living within it.

The three keys to success are:

- Understanding the system and who has which levers of control,

- Interpersonal skills and knowing how to effectively exert influence with those who’s hands are on the levers of control¹, and

- An agreed understanding of the outcome to be achieved.

Herein lies a challenge for the military officer, which Navy seems generally to equip poorly to overcome. Most Navy officers, and seaman officers in particular, are inculcated for the first decade or two of their careers with a command and control culture that sits uncomfortably in the matrix management environment. The matrix is an alien place for someone who has grown up through executive roles in a ship. These are the people who run the Navy.

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**Recommendation 27**

*Development of Navy's Executives*

Navy should examine the efficacy of the current means by which its executives are equipped to achieve success in the Defence business model, both by career path and formal training.

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This situation is most challenging for Navy establishment Commanding Officers and FEG Commanders. Without a suitable preparation for the challenges, they will (and if the considerable evidence observed during this review is anything to judge by, they frequently do) struggle.

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¹ Note that two of the three significant points are about managing the relationship, not doing the things that matter.
This is an issue that impacts indirectly on achieving a sustainable workforce in the submarine capability and likely more widely across the Navy because it is another source of the frustration and irritation that bring people to the point of being sufficiently fed up to leave. The volume of anecdotal evidence from the submariners of the effort required to get even the most mundane things done in today's business model was as substantial as the intensity of their frustration. Frustration with what are perceived as inexplicable management decisions to arbitrarily restrict financial resources in the name of efficiency has a compounding effect.

**Key Observation**

The decision to structure this report along FIC lines was taken, as noted in Chapter 1 'Introduction', to make it simpler to attribute tasks associated with implementing the recommendations made. It is interesting to observe here that it appears not to have turned out that way, with various authorities 'owning' subparts of the work that the Review identifies as being needed. One might conclude that if the organisation is not structured so that responsibility, accountability and authority are aligned comfortably around the fundamental inputs to capability then either they, or the organisation, need redefining.

13.3 NAVY LEADERSHIP CULTURE AND TRAINING

Leadership has been a key and pervasive theme in this report. Navy's leadership training came in for serious criticism several times, from officers and sailors, most especially those with experience of such training elsewhere, including the other Services. There was some criticism of leadership training at HMAS CRESWELL during the New Entry Officers' Course, although broader examination suggests that corrective action has been taken and that training is now much improved. Nevertheless, continued vigilance by senior leadership on this most crucial foundation stone of Navy's success is essential. Even a short lapse in the quality of training delivered can have enduring consequences. The evidence suggests there have been several serious lapses.

Navy must also recognise that those who join the ADF these days are not a homogeneous lot as they tended to be 25 years ago. They originate from a complex and diverse array of backgrounds, educational qualifications and levels of life experience these days, including experience working in a wide variety of leadership cultures and roles. Such people were often quick to criticise Navy's leadership culture during the course of the Review, the most common theme being that Navy's approach is a relic of an era long since past. There seems little doubt, from the evidence and the strength of the comments, that this is an issue that is impacting retention.
Recommendation 28
‘Navy Culture’
Navy should undertake a cultural self-assessment and re-definition program, with a view to defining and implementing the leadership culture that is required for future success in the labour market as well as in combat in the maritime environment.

13.4 A LOOK AT THE RAAF

A briefing was received during the course of the Review from the team (of some half dozen people) undertaking the RAAF Aircrew Sustainability Review. Their approach is very different from that taken for this Review; however, RAAF’s issues were also different. There were several elements of their approach that could be used to good effect by Navy in other areas. In particular, their ‘temporal discipline’ approach has potential utility in several areas.

Although not specifically researched during the Review, positive comment was heard several times on the RAAF’s Adaptive Culture Program, which seems to have been very successful and may be of some utility in addressing Navy’s workforce issues.

Recommendation 29
‘A Look at the RAAF’
Navy should examine the RAAF Aircrew Sustainability Review methodology and outcomes and the RAAF Adaptive Culture Program for applicable lessons.
SUMMARY ANALYSIS OF THE SUBMARINE GROUP PROFILE OF UNIT LEADERSHIP, SATISFACTION AND EFFECTIVENESS (PULSE)

Generally, the findings suggest that the submariners are professional, committed and enjoy their job. However, their treatment or perceived treatment by the organisation as a whole is reflected in a low commitment to staying in the Navy. The numbers in the PULSE forecast a completely unsustainable rate of attrition. At present, 34 – 48% plan to leave in the short term. That attrition statistic has a direct impact on the sea/shore ratio, this 'system’ then develops into a spiral causing the rate of attrition to accelerate.

Generally the motivation for SM service is intrinsic. This is a sound and very important indicator. Extrinsic motivation is fleeting and cannot be sustained long term. Intrinsic motivation is lasting and will effect commitment. Thus, if money is used as a blanket solution it will create more difficulties, as it is likely to attract the wrong type of person to the squadron.

The results from the PULSE survey are useful in determining patterns. From these results it appears that a targeted approach to the issues would be more effective. For example there was a reasonable degree of variation between units on some of the individual scales however overall; low scores on commitment were evident.

The PULSE results showed that a significant number of submariners are undecided about their future, which is actually good news. These are seen as the people to target, particularly in the light of the World's current economic climate (recessions are historically very good for military recruitment numbers).

Those who were ‘undecided’ comprised:

19% of SMN/AB
30% of LS
25% of PO
35% of CPO/WO
22% of MIDN/SBLT
22% of LEUT (of concern 37% ready to leave in the short term)
35% of LCDR

A number of the issues that precipitate the desire to leave do not appear complicated. Return to Australia psychological screening (RTAPS) has repeatedly raised basic issues such as mail, not getting paid on time, not getting allowances on time, difficulties with DHA and separation from family for no good purpose. A great deal of dissatisfaction relates to poor personnel management, not usually by intent but rather a lack of skill on the part of the Divisional Officer. This is an area that requires immediate attention.
DIRECTIVE BY THE CHIEF OF NAVY

TO

REAR ADmiral R.C. MOFFITT AO, RAN

SUBMARINE WORKFORCE SUSTAINABILITY REVIEW

APPOINTMENT

1. You are appointed to HMAS HARMAN (Navy Headquarters) additional, to date 26 May 2008, for duties in the Office of the Chief of Navy to undertake a review of submarine workforce sustainability.

SITUATION

2. A range of factors are placing pressure on the uniformed Navy people in the submarine workforce and impacting Navy’s ability to generate the required level of capability from the Submarine Force. Some of these factors are confined to the submarine community while others also affect Navy more broadly, such as the shortage of seaman officers. Others are the by-products of problems being felt nationally, such as the shortage of people with technical trade qualifications. Such pressures have existed for some time and the submarine force has historically been susceptible to serious impact from most of them. The situation is now more severe than for many years and continued efforts to address the pressures and reduce the impact on the generation of Australia’s submarine capability have met with little or no sustained success.

MISSION

3. You are to undertake a review of the issues impacting and likely to impact on uniformed submarine workforce sustainability. You are to propose actions which will provide Navy with the assurance that it will have the ability in future to deliver and sustain the optimum submarine capability required of the Australian Defence Force.
4. I expect you to produce a comprehensive report and propose practical and executable solutions. I encourage you to make innovative proposals, and no matter how much they might challenge the status quo or conventional thinking. Your review is to include, but not be limited to, an examination of the following broad areas:

a. The organisational structures and processes required to generate and sustain the submarine capability required by Government (i.e., the directed level of capability [DLOC]);

b. The effectiveness of submariner recruiting processes including how recruiting targets are set and acted upon, the utility, extent of implementation and success (or otherwise) of direct and directed recruiting, and what more could be done to address recruiting shortfalls;

c. Previous and current projects, reviews or management initiatives within Navy and elsewhere that were or are intended to impact the provision and sustainment of the submarine workforce (such as Sea Change, Program Nautilus and Project Klaxon);

d. The level of capability that can be generated and sustained with the current and forecast uniformed submarine workforce;

e. The utility of the metrics currently being used to report the capability and sustainability of the submarine workforce, especially in forecasting emerging or potential opportunities and problem areas;

f. Management factors affecting individual submarine workforce specialist categories, including the impact of the resources currently being applied to category management, development and sponsorship;

g. The efficiency and effectiveness of the total training system in generating and sustaining the required uniformed submarine workforce;

h. Issues that are positively and negatively impacting retention within the uniformed submarine workforce at an individual level, including such things as the Collins Class Usage Upkeep Cycle, the deployment pattern of the boats, scheduling of submarine activities generally and the tempo of activity being experienced by individuals in the submarine workforce (i.e., individual “pers tempo”);

i. Whether multi or flexi-crewing may present possible options to positively influence retention and how such schemes might be implemented most productively to have that effect; and

j. Conditions of Service issues that may be impacting retention and which are not currently being addressed or planned for examination.
TASKS

5. Your principal tasks are to advise me on:
   a. The reasons for the current situation and the nature, extent and impact of the pressures being experienced;
   b. What submarine capability can be generated and sustained with the workforce currently available and in prospect for the next few years;
   c. What measures might be necessary in addressing the pressures identified, so as to achieve a stable uniformed submarine workforce that allows Navy to deliver and sustain the submarine capability required by Government currently (DLOC); and
   d. The optimum sustainable peace time level of capability that could be generated from six submarines if there were no financial or people supply constraints and what size the uniformed submarine workforce would need to be to achieve that level of capability.

6. While not a key issue for your review, lessons that you identify from Navy’s experience operating the Collins Class submarines, and the transition from the Oberon Class, that should be taken into account in planning for a next generation submarine. These lessons should be incorporated in an Annex to your final report.

ACCOUNTABILITY

7. You are accountable directly to me. You are to keep me and the Deputy Chief of Navy fully informed as to the progress of your review.

RESOURCES

8. You are to submit a financial plan to the Deputy Chief of Navy for his approval, outlining phased estimates of the financial resources you require to complete the review.

9. Dedicated staff will not be provided but you may draw on the resources of the offices of the Chief of Navy and Deputy Chief of Navy for any administrative support you may require. You are to seek any dedicated or specialist staff assistance you may require from the Deputy Chief of Navy.

10. You may task the Fleet and Systems Commanders to have their staff undertake work on your behalf.

CONSULTATION

11. I expect you to consult very widely, with the objective of developing as thorough and complete a synopsis of the issues and potential solutions as possible. You are authorised to consult as widely as you consider necessary within Defence and with other appropriate agencies and organisations in Australia and overseas. You should advise me in advance of consulting overseas or with any person or organisation that may be sensitive or contentious.
REPORTING

12. You are to provide brief verbal progress reports to me monthly, or more often if you consider there are matters on which prompt action is required. You are to provide short verbal progress reports at scheduled meetings of the Chief of Navy's Advisory Committee (CNSAC), the first on Wednesday, 18 June 2008.

13. Your final report is to be submitted to the Chief of Navy in hard and soft copy by Friday 31 October 2008. You are to be available in person to discuss the review findings at CNSAC on 12 November 2008.

14. Your report will be a sensitive document because it will address the generation and sustainment of a major element of Australian Defence Force capability. I expect it will most likely need to be classified CONFIDENTIAL at least for this reason. I also expect there will be media interest in the outcome of the review so your report is to include an unclassified executive summary suitable for public release.

REVIEW

15. You are to keep this Directive under review and make proposals for change as you see fit.

ACKNOWLEDGMENT

16. You are to acknowledge receipt of this Directive to my Chief Staff Officer.

R.E. SHALDERS
Vice Admiral, RAN
Chief of Navy

Tel: (02) 6265 5165
Email: chiefofnavy@defence.gov.au

June 2008

Rear Admiral R.C. Moffitt AO, RAN

For Information:

Chief of the Defence Force
Chief Executive Officer, Defence Materiel Organisation
Deputy Chief of Navy
Commander Australian Fleet
Deputy Secretary Personnel Strategies and Policy
Commander, Australian Navy Systems Command
Head of Maritime Systems Division
Commander, Australian Navy Submarine Group
Director General, Navy Personnel and Training

3/06/2008 4:36:37 Version 1.0
I am writing to you, as someone who has been a part of Australia’s submariner community, to let you know that I have been commissioned by the Chief of the Navy to undertake a comprehensive review of submarine workforce sustainability. I also seek your help with the review.

As you would probably know only too well, Navy people in the submarine workforce have been under pressure for many reasons over recent years. This has had a serious impact on Navy’s ability to generate the required level of capability from the Submarine Force. Some of these pressures probably exist only in the submarine community while others also affect Navy more broadly, such as the shortage of seaman officers. Some are the by-products of problems being felt right across the country, such as the shortage of people with technical skills. The submarine community has historically been hit quite hard by such pressures and the situation is now more severe than it has been for some time. So far, Navy’s efforts to reduce the impact on the Submarine Force have been not as successful as we need.

What you can help me with is information and your opinions. I am keen to hear about your experience in submarines, especially those things that you found were either outstandingly bad or particularly good. I am naturally interested to hear about the things that may have convinced you to leave submarines but those things that either attracted you to join submarines or convinced you to stay are important to me as well, so that I don’t recommend changes that might interfere with what is already working well.

I know you will have completed an exit survey that might tell me some of this information. But I also know that some people who leave decide, for very good reasons, not to tell us about some of the things that we really need to be trying to fix. This is the sort of information that will be very important if my review is going to identify all the key problems that Navy should work to correct.

As well as all that, I would be very interested to know if you might consider coming back into the submarine community to serve full or part time, and under what circumstances. By that I mean, what would we have to offer you, or to change about the way we do business, for you to be interested in coming back?
If you are interested in coming back in, either to general service or the submarine community, we would be very pleased to hear from you. Please contact the Director of Navy Employment Conditions, Commander David Wilson RAN (02 6265 3227, or david.wilson6@defence.gov.au), who can also update you on current conditions of service and pay scales.

I am interested in anything you are prepared to tell me. I will treat what you say in strict confidence and not reveal your identity if you want it kept private.

You can write to me at the address on this letter head. If you address the letter to me by name and mark the envelope “personal”, it will be opened only by me, not by anyone else. Alternatively you can send me an e-mail to the address shown but in this case other staff may see it as well. You can also talk to me personally if you would prefer, by providing me with your contact details and a time that would be suitable for me to call you.

I am not a submariner so you may not have heard of me. I am a seaman officer, a ‘skimmer’ navigator by trade with almost thirty five years in the Navy. I commanded HMA Ships NEWCASTLE and BRISBANE and I have been the Deputy Chief of Navy and the Fleet Commander. So, I have been around and seen a bit in my time. I will be retiring from the Navy next year and my only interest is to see a good outcome for Navy from my review. The best possible outcome for me would be a capable submarine force with a stable workforce that does not suffer from any shortages of people, so far as Navy can avoid that by its own actions.

I hope you will help me with this very important project. I don’t have all that long – I must deliver my report to the Chief of Navy at the end of October this year.

I look forward to hearing from you.

Yours sincerely,

R.C. MOFFITT, AO
Rear Admiral, RAN

August 2008
SELECTED BIBLIOGRAPHY

Occupational Analysis of the RAN Cryptographic (CT) Category, by DSPPR, 2007

Collins Class Submarines, A Study Examining the Issues of Sleep, Fatigue and Performance, 2008 DSTO-CR-2008-0150


HMAS WARRAMUNGA Flexi-Crewing Trial Exit Report dated 10 Apr 07

HMAS ARUNTA Flexi-Crewing Trial Exit Report dated Jul 08

“Love ‘em of Hate ‘em: Learning to Live with Elites” by Bernd Horn

Final report for the Navy CT & AWA Specialists HRDSS 01/2007

Results of the Submarine Force Element Group PULSE, July 2008 by Major Anne Goyne, Psychology Research & Technology Group, Defence Force Psychology Organisation

Return to Australia Psychology Screen Reports by Navy Psychology West for:
- HMAS DECHAINEUX August to October 2004
- HMAS SHEEAN June to October 2004
- HMAS SHEEAN June to October 2005
- HMAS FARNCOMB May to September 2006
- HMAS RANKIN October 2006
- HMAS FARNCOMB January to June 2007


The Collins Class Submarine Story – Steel Spies and Spin, by Peter Yule and Derek Woolner, Cambridge University Press, 2008

A Brief on the Issues Arising from Consideration of the Requirements for a Future Submarine Capability for Australia by the Submarine Institute of Australia

The Management of Stress and Fatigue Amongst Royal Australian Navy Submariners by Lieutenant Sarah Chapman, 2001

Bibliography 1
Quinquennial Review of Specialist Pay for the Submarine Service, a paper by the UK Ministry of Defence, August 2007

Getting on the Front Foot in the War for Talent: a Four Step Strategy a report for the HRDSS Project for Retention of Critical Category Personnel by Sigma Consulting, June 2005

Acoustic Warfare Analyst Submarines category (AWASM) Management Plan 2008 (origin unrecorded)

ABR 6103 The SUBSAFE Program

ACSC Student Syndicate Brief to CDF on Career Commitment in the ADF, July 2008


Towards 2025 Submarine Force Element Group Strategic Plan 2008-2009 (Draft)

Managing the Risks of Organizational Accident by James Reason, Ashgate 2000

Summary of Issues Raised During Conditions of Service Review Visit To HMAS STIRLING 16-18 June 2008 by Lieutenant Commander W. Gould RANR

Towards 2025 – Submarine Force Element Group Strategic Plan 2008-2009 (draft)

Annual Report to CNSAC by the Head of Engineering Community, 29 April 2008

Engineering and the Navy, by Commodore P.F. Greenfield, AM, RANR 12 October 2008

Chief of Navy Due Diligence Report, Major Fleet Units, by Rear Admiral T.B. Ruting AM, CSC, RANR, 30 September 2008

Chief of Navy Due Diligence Review – Submarine Capability, by Captain T. Idrus, OAM, RANR 3 October 2008

Engineering and the Navy, by P.F. Greenfield, AM, October 2008