

SECTION 11. RAN CONFIGURATION MANAGEMENT

11.1 There have been some allegations in evidence notably from CMDR Sippel [T4199], CMDR Stapley [E355] and Mr Bruce, the Contract Administrator for ADI [T3854-3855], that there is a lack of discipline in configuration management in the RAN. They suggest that some configuration changes have been inappropriately accomplished by means of the TM200 repair process. These allegations may well be true. The Board suspects that the prime motivation for using the TM 200 process to implement change is a strong desire to quickly implement safety and other improvements (e.g. reducing fuel leaks). Unfortunately, use of this repair process bypasses a number of checks which may expose more fundamental safety issues.

11.2 While it is tempting to suggest that change process should be expedited to alleviate the frustration and allow modifications to be made quickly, the nature of investigations necessary before changes are approved is often unavoidably protracted. Resource constraints limit the staff available to process proposals and restrict the funding for investigations of the feasibility and safety of proposed changes. Detailed work is often required to develop a proposal to the point where management can make an informed decision on the desirability and priority of the change. The lead times are compounded by the time required to put in place suitable contractual arrangements for the investigation and ultimately the work to make the change. Some streamlining of the process may be possible but is unlikely to be of the order that personnel at the coal face would like to see.

11.3 No unequivocal evidence has been produced to substantiate widespread malpractice but there seems little doubt that the practice exists to a degree. One of the difficulties is in determining exactly what is a configuration change. LCDR Crouch gave an example in evidence of his attempts to replace a rusting steel 44 gallon drum, used to store firefighting foam for the flight deck foam cannon, with a more durable stainless steel container.[T4460] Although he initially planned to accomplish this change by TM 200 action, someone pointed out to him that it was a configuration change and a TM187 approach was more appropriate. Technically, this advice was correct but the ship still had an unsatisfactory arrangement. To be on the safe side, all changes to ships should be subjected to a rigorous change process, but this approach ignores the imperatives of schedule, common sense and initiative.

11.4 The key to the right approach is good professional engineering judgement. Ideally, this would be exercised in the first instance by the initiator of the potential change but a professional engineering authority should validate it before work is set in train. The Board has not explored whether the RAN has the right resources close to or at the waterfront to exercise this role. The staffing of OAWA is certainly inadequate in terms of qualifications and capacity to assume this responsibility. In the light of resource limitations, there may be no choice but to persist with current unsatisfactory arrangements for configuration change.

11.5 In the case of the flexible fuel hose change, no competent authority either within the RAN or ADI critically examined the wisdom of the intended course of action. The innocuous title of the job ('manufacture and install flexible fuel lines M/E's') hid it from possible critical scrutiny at the pre AMP meeting [T4187]. There was at least one other configuration change planned as a TM 200 which was identified and stopped by CMDR Sippel at that meeting [T4188]. These instances [T4194] in WESTRALIA may be

symptomatic of a poor understanding of the implications of configuration change on a RAN wide basis.

Conclusions

11.6 The formal RAN configuration change process is circumvented at times, generally by well intentioned personnel, and this can have a severe impact on safety.

Recommendations

11.7 An urgent review of the configuration management training provided in MEO and CO Desig courses together with a review of other pre joining and career courses should be conducted.

11.8 A firm reminder of the importance of a disciplined approach to configuration management to the RAN community should be issued and reinforced on a regular basis. The Board notes the direction given by the Maritime Commander [MHQAUST message 210733Z JUL 98] to initiate audits and to manage the safety implications resulting from the unauthorised configuration changes and inappropriate use of procedural workarounds.

11.9 A technical review of work packages by a competent professional engineering authority should be introduced as part of the procedure for authorising work.

11.10 A review of the RAN configuration management process in the light of the shortcomings revealed to this Inquiry and the recent organisational changes such as Class Logistic Offices and Refit Planning Logistic Support Services (RPLSS) contractors, should be conducted. The review should include an assessment of the level of engineering expertise available in the RPLSS offices.