

H.M.S. 'ILLUSTRIOUS' SPECIAL REFIT

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ABSTRACT

This article provides a brief overview of the proposed work content of H.M.S. *Illustrious* special refit, whilst giving an insight to the project management arrangements. It also draw attention to issues on which early thought is being directed.

Background

One of the savings measures taken during LTC '87 was to defer the refit of the CVS Class by two years, thus making an interval of eight year between refits containing a six year period of operations and two years in stand-by. In mid 1989 *Illustrious* was placed in a state of preservation by operation (P×O) following a docking at FMRO Portsmouth. The ship will remain in this state until the start of the refit and during that period she will be at 30 days notice for sea.

Special Refit Objectives

The term 'Special Refit' applied to the recently completed refit of H.M.S. *Invincible* and it is also a correct designation for this forthcoming refit of *Illustrious* which is programmed to start at Devonport in 1991 as part of the Devonport Management Ltd. (DML) core programme. The specific aim of these refits is to bring the first two ships of the class up to the final build



FIG. 1—H.M.S. 'ILLUSTRIOUS' AND A SEA KING

standard of H.M.S. *Ark Royal*. In practice the passage of time has resulted in the build-up of other improvements which will advance the capability of *Illustrious* beyond the *Ark Royal* standard. The notable A&As for this refit are Goalkeeper, Lightweight Seawolf, Radar 996, improved 'ski-jump', and major accommodation changes.

Proposed Work Package

The total cost to the MOD attributable to this project will amount to approximately £140M, of which some £55M will be in the form of material supplied by the Sea Systems Contollerate. It is also expected that the ship's complement during the refit will be greatly reduced. The sort of reductions in mind will have the result of leaving a ship's complement considerably depleted compared to that which is normal for a CVS refit. This effect will mean an increase in the DGSR bid to fund those tasks normally falling to ship's staff in refit periods such as sentry duties, cleaning, etc.

Refit Specification and Management Proposals

Early in the planning phase it was appreciated this major project would benefit significantly from the employment of commercial expertise to write the specification. Accordingly an invitation to tender was sent in early August 1989 to six leading companies in this field. Ocean Fleets emerged as the successful company from this competition and soon capitalized on the fact that *Illustrious* is in P×O by setting up their team on board ship. This initiative has allowed considerable research to be undertaken alongside ship's staff thereby ensuring the specification will best reflect the true work package and hence minimize the level of emergent work during the refit. This point is particularly relevant as DGSR's most recent Long Term Review made much of the fact that emergent work was the single most significant cause of previous contract overruns. There is a further option, to extend the Ocean Fleet contract to provide contract management at the waterfront during the refit thereby linking the specification writing firmly to control of the work.

Risks

By the very nature of this being a 'Special Refit' there is a heavy element of modernization work (A&As) to be done compared to our normal refits. The financial provision for the A&As reflects this feature. The update programme represents the greatest risk to this project as the necessary guidance information has to match the tight pre-refit timescale. Many initiatives have been put in hand to streamline the process as best as possible by working closely with the Sea Systems Contollerate and DML's design contract division.

Planning

There have been discussions on the case for placing a pre-tendering planning contract with DML for this refit as is the practice for nuclear submarine refits of equivalent scale. This would be split into three phases. The first phase would identify the key events and interlink these in an overall network. Phases II and III would be completed in the period from Invitation to Tender to the start of the project and would cover, in Phase II, the identification of the logistic support needed for the project, while the final phase would generate a fully resourced time-based network with supporting subnets. One of the advantages of placing this contract early is to identify the critical material for the refit that might merit advanced ordering.