

THE INFLUENCE OF SURVIVABILITY IN THE DESIGN OF A CAPABLE, AFFORDABLE SURFACE COMBATANT

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SUMMARY

The platform designer has to balance a multitude of design influences with affordability. One key influence of particular interest to a warship is survivability. This paper will explore the survivability management process being used for the Type 26 Global Combat Ship. It will cover the design options explored and the modelling used in support of these choices, with focus on the strategies for the protection of ship's crew, systems and key spaces. The early design approach included the identification and analysis of a large number of options that could be chosen to change the reference design. Several of these options involved survivability features, such as magazine fragment protection, high value compartment protection, blast resistant structure, collective personnel protection and shock protection. The paper will explore the vulnerability assessment process of the reference design, quantification of the effect of the design options, presentation of the survivability cost/benefits and trade-off between the options.