

## Brief Description: THE IMPACT OF CONTRACTS ON SHIP DESIGN PREPARATION

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The implementation of vessel designs is usually achieved through contracts for ship construction or conversion. Accordingly, the design process and the design organization's product have to anticipate and take into account the constraints and requirements of the contracts that control the use of the design, as well as the contract that initiates the design process. This paper addresses the most common contractual factors that have to be considered during preparation of ship designs.

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The details of those factors are too complex to summarize individually. However, the broad concepts addressed are summarized by the following.

- Multiple contracts are needed to achieve implementation of a vessel design.
- Specifications and plans have to be complete and suitable for use in contracts.
- The specifications and plans will be the basis for binding answers to many questions during execution of the shipbuilding contract.
- The specifications and plans have to be suitable for quantitative translations during the shipbuilder's estimating and bidding process.
- The designers have to ensure that the specifications and plans are wholly compatible and consistent with all the other elements of the shipbuilding contract.
- The ship designers will have responsibility, along with others on the ship owner's team, to timely provide information responses to all communications received from the shipbuilder.
- All information flow between the owner's team and the shipyard has to be planned by addressing content, form, format, timing and intended use of the information.
- Intellectual property rights have to be addressed before the transmittal of any design information.
- First class marine practice is not interpreted the same way by owner and shipyards.
- There has to be tight coordination between design organizations when several different ones are concurrently working to develop the detail design.
- The recommendation to incorporate a 'better' design feature must be based on a clearly defined criterion of what makes it better.
- A designer's responsibility has to include anticipated growth of the ship in future years.

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