Igorova promišljanja (55) – Igor’s Reflections

**Ethics and Economy in Ship Design**

**Summary**

In designing a merchant ship, as one of the main criterion appears to be: lowest building costs and highest yield for a given deadweight and speed. The design of a ship may also influence the quality of transport, the state of transported goods. The safety of ship, the safety of life at sea, however, is the most important criterion.

Ratio between deadweight and displacement $\frac{DW}{\Delta}$ may be considered as a measure of economical efficiency of a ship: the income depending on deadweight and expenses on displacement respectively. Accordingly the ship designer is endeavoring to increase the ratio $\frac{DW}{\Delta}$ for a given ship by reducing the lightweight $LS$, equation being: $DW + LS = \Delta$. Nevertheless specific reductions of the lightweight $LS$ should not affect the safety of ship. And just this aim represents constant challenge to a ship designer. Lost lives, lost ships and goods in 20th century only, put also question of ethics in ship design.

This and next *Reflections* as well expose and consider some of the dilemmas involved.