

VIBRATION AND SHOCK ANALYSIS OF A MAST STRUCTURE **AGAINST MIL STD REQUIREMENTS**

Lt Cdr JJ Mattam (DDND, IHQ MOD(N)DND SSG, New Delhi)

This paper is based on a structural analysis undertaken to validate the integrity of a mast structure against dynamic loads due to vibration and shock. The vibration loads are considered as specified in MIL STD 167 and shock load is considered for an underwater explosion. The shock load considered is the same as that considered for machinery foundations sited on the keel of a ship. Though it is safe to assume that the shock load due to underwater explosion for a mast structure will be much lesser than the load experienced by a machinery foundation, the worst case is considered since no data regarding the damping of the shock load by the ship's hull is available for the structure under consideration.

Key words: - Vibration; MIL STD; Mast; Shock; Underwater Explosion;