A Full Implementation of A Shipbuilder's Earned Value Management (EVM) System Using *PERCEPTION*©

EV-GD-001

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Foreword

There is general agreement among shipbuilders that intelligent control over basic resources (engineering, manpower, material, facilities and time) will result in improved ship construction costs.

The task of estimating costs, planning and scheduling men and materials and then controlling these resources to maximize production output, while minimizing costs, can be a very difficult job. These efforts become more complex with the increase in the size of the shipyard organization and the scope of the yard operations. Modern-day shipbuilding poses no mean management challenge.

A very basic problem has been job progress visibility, or lack thereof. Without it, management essentially must operate blindly. Cause and effect relationships become blurred in the midst of daily shipyard production problems and drain away the capacity to direct production effectively and economically.

Knowing precisely, and in a timely manner, the exact status of men and material, a responsible management can rectify problems quickly before they become critical. Logical priorities can then be assigned to solving various impacted areas of production and ideally new techniques can be developed, simulated and evaluated to improve current yard production methods.

Most shipyards today have means for accounting and reporting job resources and schedules, but mostly employ manual methods which have difficulty in producing complete, accurate and timely information. Manual methods suffer from too much duplicated effort, and the inability to produce sufficient information quickly enough.

This kind of timely, valuable information can be readily produced by a well designed and implemented Earned Value Management (EVM) system.

A recent (2010) survey of U.S. government contractors by the Grant Thornton LLP company revealed that 28% of participating contractors reported having contracts that required Earned Value Management (EVM) systems. Of those, only 37% believed that EVM is a cost-effective management approach. And only 25% of the reporting contractors indicated they would adopt the system even if they were not required to use it.

Why has EVMS gotten such a rather poor regard by the industry? There can be several reasons.

EVM requires the full support by management to be successful. Without this support, the EVM system is likely to be relegated to the background of company operations when its intent is to be out front providing management what they need to know on a continuous basis about a contract's cost and schedule performance, both good and bad. Too often,