

Naval Surface Ship Maintenance: An Unconventional Approach to Improve Performance

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This thesis presents an alternative approach towards meeting the challenge of delays within private shipyard repair of Naval Surface Ships. The quest to create greater efficiency, effectiveness, and excellence at the workplace has been a source of discussion and debate for the Navy for decades, particularly within the private sector surface ship maintenance enterprise. Recently, the Chief of Naval Operations (CNO) emphasized the priority to improve depot-level maintenance of our Navy ships, which directly impacts our readiness to control and project power against our most lethal adversaries. The CNO presented the delay and under-performance of depot-level maintenance as a "challenge [that] is not new" (NAVPLAN, 2021). I propose that these maintenance issues most fundamentally implicate questions of underlying assumptions that dictate both thinking and subsequent actions of performance.

To explore this concept, this thesis describes the main stakeholders involved in the Navy non-nuclear surface ship maintenance enterprise; briefly outlines the current maintenance process from contract formation to ship delivery; and discusses the known factors contributing toward private sector surface ship maintenance delays. I make use of direct reports from the Navy, formal analytical reports, other relevant literature, and interviews conducted with 20 respondents including Navy Commanding Officers, a Private Shipyard General Manager, and a Regional Maintenance Center Waterfront Operations Director, among others. Four themes emerged for areas of suggested improvement: a refocused purpose and vision, updated motivation techniques, systems thinking, and effective communication and coordination. I also present a case study of two private shipyards at one company which have practiced an alternative approach to maintenance challenges in relation to findings within the four themes. An analysis of this case in the context of the broader literature, through three lenses (structural design, political, and cultural) in connection to the four themes led to further insights, recommendations, and areas for future research.

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