

## PROPER STAFFING FOR CONVERSION PROJECTS

*Success is dependent on having appropriate staff*

When ship owners arrange for conversions and/or major refits to vessels already within their fleet, they typically expect that their usual contingent of ship superintendents can oversee the project. After all (so goes their thinking) it is just another project at another shipyard involving a vessel with which the superintendents are already quite familiar.

This belief is not well-founded. It often is, in fact, counter-productive. How do we know this? Fisher Maritime has been called in to act as project management support to “rescue” a number of ship conversion projects that were in dire straits (considerable cost and schedule overruns) due to the fact that the project was beyond the ability of the owner’s on-site staff to keep up with the project’s demands.

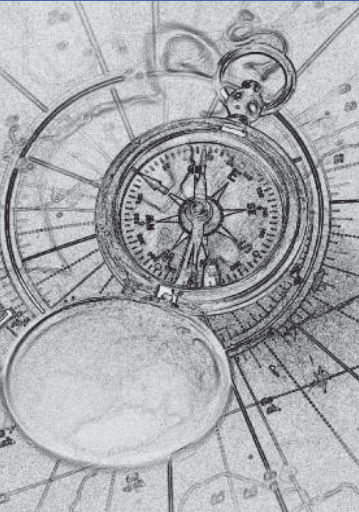
### The Responsibilities May Go Beyond the Scope of the On-Site Staff

The problems start with a failure by ship owning organizations to recognize that a major refit or conversion requires firstly the development of a contract and specification that adequately describe all of the work necessary to complete the vessel to the owner’s satisfaction. Too often, the staff that oversees routine maintenance is called upon to develop specifications for a much different type and extent of work. Then, once the work commences, owner’s staff must respond to each and every communication from the shipyard; and each such response has to be well founded, complete and based on the contract terms, not simply an informal or offhand reply. This places a burden on the owner’s on-site staff that goes far beyond the responsibilities that have to be satisfied during smaller-scope ship repairs.



### Updated Website Adds Helpful Features:

Fisher Maritime has recently completed an update of its website, [www.fisher-maritime.com](http://www.fisher-maritime.com). A number of publications have been made available for free downloading. It is now easier to appreciate the scope of Fisher Maritime’s services and contacts in the international maritime and offshore industries. A streamlined navigational scheme links to organizations that have sent attendees to our training programs. Please let us know of any comments about the website by sending a message to [webmaster@fisher-maritime.com](mailto:webmaster@fisher-maritime.com).



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## Proper Staffing for Conversion Projects, from Page 1



Thus, the ship owner's use of the normal complement of ship repair superintendents for major refits and conversions effectively constitutes an understaffing by the ship owner that will almost certainly lead to an unsatisfactory outcome.

### **A Real Example of a Refit/Conversion Project Gone Awry**

Here is an example. A ship owning organization was acquiring a laid-up vessel for conversion to its own needs. The ship repair superintendents that had overseen the operation and maintenance of the predecessor ship were placed in charge of this project. Problems began almost immediately as they failed to appreciate that there were really two projects being applied to the same vessel at the same time. Namely, reactivation of a laid-up vessel is, by itself, a major refit. Then, the conversion of the ship to be able to accomplish its new mission profile was a second major project, albeit concurrent with the reactivation.

The owner's project team went into the project with only a small on-site supplemental staff—the repair superintendent, his small staff and a few of the crew members as inspectors. When design modification questions arose due to incomplete conversion design and specifications, the owner's team too often gave off-hand oral responses. By itself, that was a recipe for overruns and disputes. But also, the reactivation requirements had been underestimated by the owner's design agent; so numerous growth work items arose at the shipyard.

The members of the team who were initially on-site were

competent, but overwhelmed. Missing from the on-site project team was sufficient professional resources. This deficiency began with the initial planning of the reactivation/conversion, resulting in an inadequate contract and specification. Even very competent persons too few in number are just not sufficient for conversions and major refits, particularly when the contract documents are flawed.

Further aggravating the situation at the shipyard, the ship's crew was independently undertaking work on the vessel without having integrated their schedule and resource requirements with the shipyard's. The two parties were often in each other's way, leading to a loss of productivity and sometimes to the necessity of rework.

The use of ship's crew to act as inspectors, overseeing the shipyard's work, initially seems to make sense, since the crew is familiar with the vessel and is already on the payroll. However, without strong guidance from project management, the crew (when acting as inspectors) almost always expects the shipyard to accomplish what is needed to make the vessel essentially 100% functional in a manner that the crew members wish for, instead of limiting their criticism of the shipyard's work only to ensuring compliance with the written contract specifications.

When the rapidly increasing budget requirements challenged the coffers of the owner, and when the anticipated delays meant cancellation of near-term revenue-earning charters, the owner's team finally appreciated that it needed professional project management support (and turned to Fisher Maritime for that rescue mission).

In summary, going into a conversion or major refit, the owner's team has to assemble all of the necessary resources. Those necessary resources

### **“What's Needed:**

- **Well-developed specifications**
- **Designers experienced in the project**
- **A sufficient number of on-site professionals**
- **Communication between work crew and shipyard crew...**”

## Proper Staffing for Conversion Projects, from Page 2

include: (a) well-developed specifications and plans based on a lengthy and careful comparison of them to the ship; (b) use of designers who have experience in ship conversion projects (not just in newbuilding projects); (c) on-site availability of a sufficient number of professionals to develop considered and well-thought-out responses to the shipyard's need for additional information; (d) integration of the crew's workscope with the shipyard's workscope; and (e) training of the ship's crew on how to act as true project inspectors instead of merely as critics of the shipyard's work.

Fisher Maritime's experienced personnel have the ability to analyze the contract and separate the work that is clearly described in the contract from unforeseen tasks that were not envisioned by the contract. It is then a matter of negotiating with shipyard representatives a reasonable addition to the contract price and the added time needed for the unforeseen work. Too often Fisher Maritime has only been called after the fact to assist in litigation with the other party after everything has gone wrong. At this stage the solutions are more difficult as an adversarial relationship has developed between the parties to the contract. ▲

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### *Management of Shipyard Projects: Insights and Lessons Learned:*

This is a collection of articles from past Upright & Afloat newsletters which collectively convey the costly lessons learned from the maritime industry in association with projects being undertaken by shipyards on behalf of ship owners. These "lessons learned" will potentially allow you to avoid having to relearn these lessons at the expense of your organization. To view or download this helpful tool at no charge, look on the 'Papers' page in the Publications section of the Fisher Maritime website ([www.fisher-maritime.com](http://www.fisher-maritime.com)). From the dropdown menu select **Management of Shipyard Projects** and choose how you would like to view or print the publication.

## THE 'ATTRACTIVENESS' OF PROJECT MISMANAGEMENT

### *Erroneously disguised as a problem-solving opportunity*

Project mismanagement is not the same as poor project management. Poor project management means that the project will eventually be achieved but at greater cost and longer schedule than otherwise accomplishable. Project mis-management takes the project in the wrong direction, introducing seriously flawed decision-making which later necessitates either a reversal of direction or far greater cost and schedule corrections. It masks itself as a decision to help resolve a project's problem. But in reality it is not a decision; it is only an expression of hope, such as, "This should work out satisfactorily, I think."

### **Re-Assigning the Problem Does NOT Simply Make it Go Away**

Project mismanagement usually starts when an entity involved for certain purposes in a project offers a very attractive solution to a problem that has arisen in an area beyond its original purview. It appears that the problem will be resolved if the project managers simply re-assign responsibility for resolving the problem to a different entity than originally had that responsibility. This usually is a very attractive proposition—it is thought that the problem simply will go away if the project managers assign responsibility to the entity that is volunteering to resolve the problem, albeit at some additional cost. When project management is already stressed-out by multiple problems, the opportunity to see one of those problems be easily resolved is welcome relief. It is offered as a clean, efficient, effortless means of resolving the problem that has arisen in the project. But often it doesn't work out that well.

Here's an example. A dredge owner wanted to purchase a new, large split-hull hopper dredge to have it available within 24 months, in time to commence a long-term project. But the bidding shipyards all stated that the desired delivery date could not be achieved because the extremely large hydraulic cylinders to open and close the hull were long-lead items, controlling the vessel's delivery to over 28 months. This later-than-acceptable delivery date was the project's main problem.

At that point, the owner-retained naval architectural consultancy offered to procure those components faster

## Project Mismanagement, from Page 3

than the shipyard, provided the owner would designate the consultancy as an equipment provider and tell the shipyard that the equipment would become owner-furnished. This appealed to the owner; at the stroke of a pen (it seemed) the schedule problem would be resolved. The consultancy would obtain the equipment (for an additional fee) and arrange to have it timely delivered to the shipyard so the 24-month vessel delivery requirement could be achieved.

Of course the end of the story is predictable. The consultancy had no special powers that could eliminate the long lead time. The ship was completed late. Moreover, the owner had to pay extra to the shipyard due to the multiple critical-path impacts of the late-delivered owner furnished equipment.

The assignment of equipment procurement to the consultancy essentially was an expression of hope, but not of promise. It was hoped that action would result in avoidance of the long-lead time problem. The appealing result offered by the consultancy vastly overshadowed the need to analyze why the switch from shipyard-provided equipment to owner-furnished equipment would have such a dramatically different result. In making that assignment, the owner hoped—but did not analyze. This is but one of many examples of project mismanagement that Fisher Maritime has observed over the 32 years of its existence.

The lesson learned from this example, among many others, is this: When an entity offers a solution to a vexing problem, but before project management makes a decision about that potential problem, analyze whether the pending decision will definitely resolve the problem, or if it is only an expression of hope that by trying something different the problem will be resolved. Other examples of such project mismanagement, disguised as easy solutions to problems, are found in a Fisher Maritime's publication on our website. To view or download this paper at no charge, look on the *Papers* page in the Publications section of the Fisher Maritime website ([www.fishermaritime.com](http://www.fishermaritime.com)). From the dropdown menu select *The Mismanagement of Ship Construction, Repair and Design* and choose how you would like to view or print the publication. ▲

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Reprinted with permission from Babcock Marine's newsletter in Rosyth, Scotland, referring to the UK aircraft carrier design/build program 'CVF'.



News from Babcock Marine at Rosyth

Issue 75, July 8, 2008

## newslines

*Course puts spotlight on where our decisions can lead us.*

To improve awareness of the contractual implications of decisions we make, eighteen employees from various Rosyth business units attended a three-day course on-site last week.

Despite the course's rather unwieldy title – "The Fundamentals of Contract and Change Management for Ship Construction, Repair and Design" – it has been voted a success and feedback from attendees has been very positive.

The course was delivered by Dr Kenneth Fisher, of the globally-renowned "Fisher Maritime Consulting Group".

This training was recommended by Brian Mann and Stevie Penman, of Warship Support, who attended a similar course some years ago in London, where it is sponsored by the Royal Institution of Naval Architects.

Brian was delighted to be able to set up the course on site, saying: "Having Dr Fisher come all the way from the US to deliver this course was a significant investment, but he 'downloads' so much of his experience over the three days it was very worthwhile.

"The chance to tap into this valuable knowledge will stand our people in good stead for managing the challenges ahead on CVF and the Surface Ship Support projects".

Mr. Mann also wrote to Dr. Fisher: "As I anticipated would be the case, the feedback from the attendees was very positive; I have already seen from my own direct staff some different approaches and thought processes, which is fantastic." To make arrangements for an on-site presentation of the training program at your facility, modified to suit the needs of your organization, send a request for information to: [register@fishermaritime.com](mailto:register@fishermaritime.com).

# When do you need us?

## When you need help with...

### Contracts

Fisher Maritime writes **contracts, specifications, and complete bid packages** for new construction, conversion, overhaul or repair. We also review and revise draft contracts and specs.

**Recent contract work included new construction on:**

- Class of 400' ferries
- Class of 220' offshore supply vessels
- Class of anchor handling tugs
- Class of well test vessels

Fisher Maritime consultants are grounded in commercial fleet construction and repair, as well as naval repair and overhaul. **Fisher Maritime provides on-deck project management** services for shipyard construction and conversion projects.

*Recent project: A thorough pre-contract review of draft specifications for a high-value research vessel, initially prepared by a naval architecture consultancy, resulted in far fewer ambiguities, replacement of certain performance requirements (which would result in large contingency pricing) by firm design requirements, and greater project oversight and control by the owner, to ensure the construction of a long-life vessel.*

It takes many forms, from project-phase analysis through litigation.

**In every situation, we provide accurate assessments and incontrovertible analyses.**

*Recent case: Disputes in pipe-laying barge-conversion project about work scope, schedule, cost. Fisher Maritime provided on-site project management oversight, and follow-on expert analysis and support before arbitrator.*

We support our clients with **construction and repair disputes in state, federal, civil and criminal courts**, in every stage of litigation. We can also help you avoid litigation.

*Recent case: Emergency repairs to a damaged vessel proved to require far greater steel renewals than anticipated by the contract. The owner's representative refused to recognize that the redelivery date had to be extended as a consequence, and withheld significant funds when the vessel was redelivered later than originally planned. Fisher Maritime prepared an analysis justifying the shipyard's later redelivery of the vessel. After review of that analysis by the vessel owner's team, the parties settled the matter without going to arbitration.*

### Project Management

### Dispute Resolution

### Litigation Support

For 32 years, Fisher Maritime Consulting Group has been resolving technical, cost, and schedule issues in shipbuilding and repair contract disputes. Our clients come from every sector of the industry: shipyards, shipowners, third-party vendors, government agencies and private concerns. Because we're experienced naval architects, marine engi-

neers and project managers, we bring strength and clarity of insight to our clients. **Our overriding goal? A well-developed suite of contract documents, structured management controls for complex projects, rapid resolution of developing conflicts and disputes, and projects completed with minimal growth.**



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# 2009 Training Programs

**149 In-House Presentations & 129 Open Registration Programs Already Completed**



FISHER MARITIME has been offering these popular training programs since 1988, both of which are scheduled for open-registration in 2009 on the dates and locations shown below. Outlines of the

programs can be viewed on our website [www.fisher-maritime.com](http://www.fisher-maritime.com) or you may call to request a detailed brochure via fax or mail.

Each of the programs can be presented on-site at your organization's facility for seven or more persons at less cost than sending your staff to an open-registration presentation. Over 99 organizations in fourteen countries have had these programs presented on an in-house basis over the past 20 years. To receive details for arranging an on-site presentation of any of the programs listed below, contact us: **tel. 800-732-3476 or 973-660-1116, fax 973-660-1144, email: [email@fisher-maritime.com](mailto:email@fisher-maritime.com).**

**C&CM: Contract and Change Management for Ship Construction, Repair and Design.** This 3-day course is designed for all members of the contract management team for ship owners, shipyards, design firms, vendors, subcontractors, regulatory agencies, whether commercial or government. Senior and middle management of all those types of organizations benefit from the "lessons learned" approach to managing all contractual commitments.

2009		
London, UK	Wed.-Fri.	Mar. 25-27
Ottawa, CAN	Mon.-Wed.	Apr. 20-22
Mobile, AL	Mon.-Wed.	June 15-17
Portland, OR	Mon.-Wed.	Sept. 21-23
London, UK.	Wed. - Fri.	Oct. 14-16

**TPEC: The Port Engineer's and Owner's Representative's Course.** This 3-day course is designed for shipowner's personnel who prepare specifications, who accompany the ship to the shipyard, and who arrange for new/growth/change work during contract performance. This course helps assure getting maximum value for money spent.

2009		
Seattle, WA	Mon.-Wed.	May 18-20
Pensacola, FL	Mon.-Wed.	Nov. 9-11

**SMCC: Shipyard Management of the Customer and Contract.** This 2-day course for project managers, production supervisors, estimators and planners is the only training program specifically developed for mid-level managers of shipyards and subcontractors. Presented in-house only. Contact Fisher Maritime for details.

*Fundamentals of Shipbuilding Contracts:*

This paper is an instructive tutorial for all persons involved in the development and/or management of contracts for ship construction and construction. To view or download this helpful tool at no charge, look on the 'Papers' page in the Publications section of the Fisher Maritime website ([www.fisher-maritime.com](http://www.fisher-maritime.com)). From the dropdown menu select *Fundamentals of Shipbuilding Contracts* and choose how you would like to view or print the publication.

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