
Responsibilities Pertaining to Drawing Approvals --- Ship Construction

every reader will opine that the paper should have discussed at greater length one or more of those connections to other contract issues.

Purpose of Drawing Transmittal

When a contract requires that a shipyard provide some or all of the shipyard's drawings to the owner or to other ('third') parties, both the owner and the shipyard should understand the purpose of transmitting those drawings to the owner or third party. If both parties to the contract clearly know the objectives to be achieved by the drawings being transmitted from the shipyard, the likelihood

of a contract dispute arising over the drawings is greatly reduced. Unfortunately, the two contracting parties often mistakenly assume that the reason for drawing transmittals also serves to transfer certain contractual responsibilities from one party to another. This causes needless and off-times expensive misunderstandings.

Note that the naval architecture firm used by the owner to review drawings submitted by the shipyard is not a third party, since that firm is acting for the owner as its "authorized representative." Accordingly, reference to the owner includes the owner's naval architect, whether an employee or independent contractor. A 'third party' is an organization that essentially has its own agenda, its own reason to look into certain aspects of the contract work, yet whose actions cannot be controlled by either the owner or the shipyard once that organization's role is established by the contract.

There are several possible functions which utilize the shipyard's working drawings. The most common reasons why a contract requires the shipyard to transmit some or all of its drawings to the owner or to other ('third') parties include these, in no particular order:

- Establish compliance with regulatory requirements.
- Show consistency with classification standards.
- Demonstrate conformity to certain commercial standards.

- Show compliance with contract arrangement drawings.
- Demonstrate consistency with contract specifications.
- Owner's confirmation of acceptable detailed arrangements.
- Provide opportunity for owner to achieve low-cost, minor changes.

In the process of examining the intent of a number of commercial contracts pertaining to drawing transmittals, it has become apparent that there are often misunderstandings, misinterpretations, mistakes and missed opportunities associated with those actions. It has thus become as necessary to identify what the drawing transmittal process does not accomplish as much as it is necessary to discuss what the process does, in fact, include.

Accordingly, this analysis will include both a significant number of negatives (indicating what purposes the drawing approval process is not intended to achieve) as well as positives (identifying the obligations and opportunities) pertaining to drawing approvals.

Basis for Submittal of Drawings

When the working drawings developed by the shipyard are submitted to the owner during contract performance, it is usually done so because the contract requires their submittal. The contract language may state that the shipyard shall submit the drawings to the owner for "approval," or may state that the purpose is for "review." Occasionally, some other general purpose may be stated.

A large service vessel (\$32 million) was constructed in the U.S. with the following wording in the contract:

"All plans, purchase (technical) specifications, vendors plans, calculations and other technical documents necessary to perform the contract work shall be subjected to approval by the owner in addition

to approvals required to satisfy regulatory body requirements."

This is a good example since it (a) indicates that approvals other than the owner's are also required, (b) it does not indicate or otherwise limit the purpose of the owner's approval, and (c) it does not obligate the owner to approve or review all of those plans or documents, but only gives the owner the right to do so. This last point implicitly emphasizes to the shipyard that the shipyard has no other party to blame if the work is not performed according to contract specs & plans.

Vessel Conversion

The \$16 million contract for conversion of a service vessel in the U.S. included this wording:

"The engineering calculations and working drawings shall be submitted by the Contractor sufficiently in advance of their need to permit detailed review by the owner and other reviewing agencies, taking into account the possibility of rejections, revisions and resubmittals. Engineering calculations and working drawings submitted to the owner for approval will normally be acted upon within ten (10) working days of receipt. In submitting an item for approval, the Contractor shall specifically call attention to all departures from the Specification, Contract Plans ... and any subsequent instructions received from the owner. Approval of items shall not in any case relieve the Contractor of the responsibility of satisfactory material, installations and operation of any items involved. ... The owner will review each working drawing submitted and indicate on one of the ... prints changes necessary to secure approvals. ..."

This is a good example for the same reasons as the previous example since it (a) indicates that approvals other than the owner's are also required and (b) it does not indicate or otherwise limit the purpose of the owner's approval.

However (c) the wording "the owner will review" may be interpreted to obligate the owner to approve or review all of those plans or documents, not merely giving the owner the right to do so.

This ship conversion example is also an improvement over the previous example because it also (d) requires the shipyard to provide sufficient lead time to cope with requested revisions before the working drawing is needed by the production staff, (e) it reminds the Contractor to specifically identify any aspects which do not conform to the contract specs & plans, and (f) it reminds the shipyard that an approval by the owner does not relieve the Contractor of any responsibilities.

Without giving a verbatim reproduction of another example, a multi-ship contract for high-value cargo vessels (each over \$70 million) also included a requirement that the shipyard provide, first, for a 21-day turn-around time on the approval of working drawings by the owner, and second, that the shipyard allow for an additional 14-day turn-around for the owner to review working drawings after revisions generated in response to the first review.

Negative Example

A large fishing/processing vessel (\$21 million) was constructed in the U.S. with the following wording inserted into the contract, which wording was the recipe for a contractual nightmare (i.e., don't use similar wording in any of your contracts):

"Where the specifications call for plans, sketches or diagrams to be prepared and submitted to the owner for approval, the Contractor shall obtain written approval of the owner or his representative before proceeding with the construction or fabrication of the system or item in question."

From the owner's point of view this is a poorly-worded obligation since it effectively means that either the owner is going to risk impacting the shipbuilder's schedule (and end up paying for delays), or going to implicitly waive

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the contractual right of drawing approval if the owner encourages the shipyard to proceed regardless of the owner's inevitable lack of timeliness of drawing approvals. (While this may sound cynical, it is well-founded on multiple examples of actual experience.)

From the shipyard's point of view, it means that all engineering and drafting are going to require well-defined lead times relative to production, and that the schedule will have to include ample time to deal with production-level changes being approved by the owner prior to implementation. Rarely does a shipyard have such a luxury of time in its schedule.

Association of West European Shipbuilders

The standard contract form of the Association of West European Shipbuilders¹ at Article 2(b), the 'approval' sub-article of "Inspection and Approval," states:

"The Contractor shall send to the Purchaser (or its authorized representative) for approval three copies of the drawings ... for which such approval is required by the Specifications. One of the three copies so submitted shall be returned, either approved or supplemented with remarks and amendments ... within 14 days from the date of receipt by the Purchaser If the said remarks and amendments are not of such a nature or extent to constitute modifications under [the changes Article], then the Contractor shall start or continue production on the corrected or amended drawings ..."

Note that the purpose of the Purchaser's approval is not stated, but the final quoted clause suggests that the Purchaser may be using the opportunity to implement a contract change. That possibility is consistent with the discussion of this paper.

¹- Appendix 1, "Shipbuilding Contracts," Comité Maritime International, Malcolm A. Clarke, editor. Lloyd's of London Press, 1982

Shipowners Association of Japan

The standard contract form of the Shipowners Association of Japan² states in Article IV(1)(a):

"The Builder shall submit to the Buyer three (3) copies each of the plans and drawings to be submitted thereto for approval The Buyer shall, within fourteen (14) days after receipt thereof, return to the Builder one (1) copy of such plans and drawings with the Buyer's approval or comments written thereon, if any. A list of the plans and drawings to be so submitted to the Buyer shall be mutually agreed upon between the parties hereto."

Note that, unlike the standard contract of the Association of West European Shipbuilders, this standard contract form does not suggest that the drawing approval process may be a mechanism to initiate a change -- though in practice it is. The important point is that the purpose of the Buyer's approval is not stated. Absent any such statement, it would be unwise for a shipyard to assume that approval of such plans and drawings could be the basis for a change in contract workscope.

Maritime Subsidy Board

Until the early 1980's, some U.S. vessels were constructed with the aid of a construction differential subsidy under a contract form developed by the U.S. Department of Commerce Maritime Administration (MarAd)³. That contract form used the following language in Article XIV(c), which language is no longer viewed as desirable in its entirety:

²- Appendix 2, "Shipbuilding Contracts," Comité Maritime International, Malcolm A. Clarke, editor. Lloyd's of London Press, 1982

³- Appendix 3, "Shipbuilding Contracts," Comité Maritime International, Malcolm A. Clarke, editor. Lloyd's of London Press, 1982

"Within thirty (30) days after award of the Contract, the Contractor shall submit for approval a plan schedule listing all plans to be prepared and the dates by which each plan is to be completed and shall later submit blueprints of all working plans (in such number as may be required) necessary to carry out this contract, and the Purchaser shall pass upon them within twenty (20) days marking corrections required for compliance with the [Contract] Plans and Specifications. ... In the case of correction or rejection, the Contractor shall resubmit the affected working plans until such time as they are approved by the Purchaser. ..."

That wording has some aspects to it which are now considered to be less-than-desirable. Specifically, that clause gives the Purchaser a responsibility to ensure compliance with the contract plans and specifications. Although it is not an exclusive responsibility -- the Contractor also has such responsibility -- it is a form of commitment that is now regarded as unnecessary.

Today's commercial shipbuilding contracts in the U.S. generally do not state the purpose of the owner's review, approval or "passing upon" of the submitted drawings. They tend to utilize wording comparable to that of the Shipowners Association of Japan, not identifying the purpose of the owner's review or approval of the drawings. That gives the owner flexibility and leaves full responsibility on the shipyard to ensure that the 'product' as defined by the working drawings conforms to the contract specs & plans.

What is Being Approved?

At times, the shipyard may suggest that because the owner is receiving the drawings for "approval," any contract changes incorporated into the submitted drawings which are not the subject of comments by the owner are therefore approved by the owner. This is a dangerous assumption. The mere transmittal of drawings

from shipyard to owner for either review or approval, and the return of them by the owner to the shipyard, cannot serve to relieve either party of their contractual responsibilities or transfer responsibilities, in part or in whole, to another party. The contract will have other, specific mechanisms for achieving changes.

The use of transmittals of drawings to obtain concurrence for changes is usually specifically prohibited by the contract. There is often wording in the contract to the effect that all drawings so submitted to the owner shall conform in all respects to the contract specs & plans; any deviation from the contract specs & plans which is incorporated into the submitted and approved drawings shall not be construed as a contract change unless such change has been separately identified as a change in accordance with the "Changes" clause of the contract.

Consistent with that contractual intent, as a reminder to the shipyard, the owner's cover letter returning comments on submitted drawings frequently will include standard language to the effect that no changes to contract specs & plans are approved by the return of the drawings, but can only be considered if submitted in accordance with the changes clause of the contract.

This is consistent with the discussion below pertaining to regulatory and classification reviews and approvals -- the owner is not reviewing the drawings to ensure compliance with regulatory requirements or classification standards. Similarly, the owner is not reviewing the drawings to ensure conformity with the contract requirements -- although the owner can and should point out when they don't achieve such conformity. (Note that this is different from the old contract form of the U.S. Maritime Subsidy Board, which stated that the owner would be "marking corrections required for compliance with the [Contract] Plans and Specifications.")

Perspectives for Approvals

The perspective of the owner at the time of reviewing, approving or passing-upon the working drawings is decidedly different from the

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perspectives of other involved parties. The shipyard, being paid to accept the responsibility of ensuring that all legitimate perspectives are properly incorporated into the final product, must appreciate the limited significance of each form of review or approval.

- (a) The shipyard must ensure that the working drawings conform to the contract specs & plans, i.e., that they represent a legitimate or valid interpretation of those contractual requirements.
- (b) The classification organization seeks to ensure that the vessel, as represented in the working drawings, conforms to the organization's own interpretation of its own standards.
- (c) The regulatory agency seeks to ensure that the vessel, as represented in the working drawings, meets or exceeds the minimum standards set forth in the agency's applicable regulations.
- (d) The owner seeks to ensure that the details of the vessel's design and construction, as rendered by the working drawings (which are the shipyard's interpretation of the contractually-defined workscope), will be as usable and maintainable as anticipated by the owner's less-rigorous interpretation of the contract specs & plans. For example, if the contract drawings do not show which way the flange projects on transverse bulkhead stiffeners, the owner may wish to ensure that they project downward to minimize water accumulation, even though an upward projection is also a valid interpretation of the contract specs & plans.

Window of Opportunity

All of the contracts are similar in that they identify a specific number of days by which the owner is to return the marked-up drawings to the shipyard. Thus far a substantial part of the discussion has focused on what the drawing review or approval process does not accomplish. Now another affirmative significance of the owners review or approval of the working drawings

emerges more clearly, vis-a-vis the contractually identified time for the owner to return the marked-up drawings.

Almost without exception, U.S. commercial shipbuilding contracts indicate that if the owner fails to return the marked-up drawings, they shall be considered as approved, and the shipyard can proceed without concern. Of course, this never means that the shipyard doesn't have to conform to the contract specs & plans even if they are not properly interpreted by the working drawings.

Rhetorically, (a) if the owner is not approving the drawings to ensure compliance with the contract specs & plans, (b) if the owner is not reviewing the drawings to assure that they conform to applicable regulations and classification standards, and (c) if the shipyard can proceed without receiving such approvals after the expiration of the turn-around time, then what is the purpose of creating a fixed time for the owner's drawing review or approval? Quite simply, the primary purpose is to give the owner a window of opportunity -- the allotted time to return the drawings with comments -- in which to ask the shipyard to interpret the contract specs & plans in a slightly different form than the shipyard's first interpretation in order to make the vessel more compatible with the owner's needs.

A secondary purpose is to give the owner the opportunity to request a change at minimum cost that did not become obvious until the working drawings were produced. These opportunities arise because there are usually multiple possible 'solutions' to the development of working details from the contract specs & plans.

Consider the following as a representative example of the opportunities for such changes. Typically, one of the contract plans could be a general arrangement of the auxiliary machinery flat showing the approximate location of many components. Due to the scale of the drawing, coupled with the box-like appearance on that drawing of the outline of a refrigerant compressor, the exact distance of the compres-

sor from the bulkhead stiffener cannot be determined from the contract drawing. The problem of exact location is further exacerbated by the lack of showing bulkhead stiffeners on the general arrangement drawing. The shipyard is tasked with the specific placement of the compressor and all the piping associated with it.

Multiple Solutions to Detailed Design

In the example the fact that the compressor is not shaped exactly as the box-like representation on the general arrangement drawing, coupled with the other limitations mentioned above, means that the shipyard has the contractual flexibility to place the compressor's drive pulley with a clearance from the bulkhead stiffener between 6" and 14" . Within that range, the shipyard will be in compliance with the contract specs & plans. That is, there are multiple 'solutions' for the detailed, working drawings which will all satisfy the contract specs & plans.

Suppose that the shipyard's first working drawing pertaining to that compressor shows a clearance of 8" to the bulkhead stiffener. The owner, upon reviewing the drawing, identifies the 8" clearance as being less-than-desirable from the maintainability point of view. The owner's comments on the returned drawing request the shipyard to relocate the compressor so that the drive pulley has 12" clearance.

Unless the shipyard has good reason not to comply with that request, the owner and the shipyard have to recognize that both 'solutions' to the placement of the compressor are consistent with the contract specs & plans. Accordingly, the shipyard reasonably should place the compressor at the location requested by the owner by the mechanism of the comments on the returned drawings.

Since the shipyard had not started the work, and since the owner returned the drawings within the allotted time, the shipyard is not being asked to experience any greater costs to accommodate the owner's request -- and the owner's request is just as valid and within the

contract workscope as was the shipyard's first-suggested placement of the compressor. The only cost that the shipyard may encounter would be the time for a draftsman to revise the drawing to show the new location of the compressor. By practice and tradition, such drafting and engineering time is considered the responsibility of the shipyard if there is no change in the contract workscope definition.

That primary scenario -- the owner's timely identification of a desired alternative that is also consistent with the contract specs & plans -- is the easy one to address. It is self-resolving when the shipyard and owner recognize that there is not just a single possible placement of the compressor which is consistent with the defined contract workscope. It is the other variations of that scenario that challenge the contract managers of both parties.

Late Return of Working Drawings

One possible variation of that scenario is the owner's return of the drawings with comments after the expiration of the contractually allotted time -- all else being the same as the primary scenario. One of the first questions that arises is, Should the shipyard hold up production work while awaiting the owner's comments? The answer is an unqualified, No.

The opportunity of the owner to comment on the submitted drawings is an option; the owner need not provide any comments on submitted drawings and, in fact, need not return the drawings or even send a letter essentially stating, "No comment." The shipyard never has an excuse to stop production work merely because the owner has not commented on submitted working drawings. (The rare contract wording to the contrary should be expunged from the vocabulary of the marine industry unless there are ample funds to combat the inevitable litigation or arbitration.)

Once that window of opportunity has closed, the owner effectively loses the right to ask the shipyard to exercise a slightly different 'solution' to the working drawings which still sat-

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ifies the contract workscope at no additional cost, unless the shipyard freely chooses to accommodate the request. Owners, or their representatives at shipyards, must recognize that the time to negotiate a longer window of opportunity pertaining to drawing reviews or approvals has passed by the time the contract has been signed. Generally, shipyards will not grant 'blanket' waivers to that negotiated period of time since they have no incentive to grant such extensions, except on a case-by-case basis.

Consistent with that requirement that owners provide comments on a timely basis if they want to utilize that window of opportunity, the shipyard cannot suddenly impose a burden on the owner by blaming delays and extra costs on the owner's failure to offer comments within that time window.

First Class Marine Practice

At times, during the process of reviewing or approving submitted working drawings, the owner will take exception to the 'solution' set forth by the shipyard on the working drawing on the basis that it does not satisfy the contractual requirement that the work be performed in accordance with "first class marine practice." That phrase or some similar one is generally used but not otherwise defined in the contract. The owner, however, relies on that phrase as a basis for rejecting or taking exception to the details set forth by the shipyard's submitted working drawing.

In fact, that phrase -- "first class marine practice" -- has two rather precise though divergent working definitions. The first one is the owner's working definition: first class marine practice is taken to mean that if the contract work can be implemented in such a manner as to increase the vessel's economic life or decrease the operating or maintenance costs of the vessel without impacting delivery date, then the working drawings and material selection to implement such mechanisms should be developed by the shipyard.

The shipyard working definition of first class marine practice addresses the profitability of the job the shipyard has undertaken for the owner. First class marine practice, per a shipyard, means that the 'product' meets all contract requirements, that the 'product' is delivered on time, that the workmanship and materials will exceed or outlast the warranty period and that it is otherwise a least-cost solution to the contract workscope.

While this may at first appear to be cynical, it is, in fact, a legitimate, business-like objective -- minimize costs, maximize profits, accomplish all the work the customer contracted for the shipyard to accomplish, and deliver the 'product' on time. Any commercial business aspires to those goals. It would be a mistake for a ship owner to imagine that a shipyard is going to be different from all other businesses by suddenly becoming charitable toward the ship owner or foregoing profitability just to keep the ship owner 'happy.' Moreover, since ship owners do not display any loyalty toward particular shipyards, but rather shop for lowest price at every opportunity, the shipyard has no incentive to accept, in whole or in part, the ship owner's definition of first class marine practice.

The shipyard's working definition of 'first class marine practice' becomes apparent in the course of the owner reviewing the working drawings submitted by the shipyard. Numerous times the owner will identify areas on the submitted working drawings where a 'better' solution could be effected, but apparently is not chosen by the shipyard due to the allegedly narrow view of the contract specs & plans taken by the shipyard.

That is the wrong time for the owner to demand that the shipyard adopt the ship owner's definition of 'first class marine practice' or that the shipyard should perform the work in a manner which is only 'a little bit more' costly in either labor or materials without passing those extra costs on to the owner. If the particular item is so important to the owner, then either the contract

specs & plans should have addressed it, or the owner can negotiate a change. The shipyard's working definition of 'first class marine practice' - least cost, on time, meets the contract workscope, and outlasts the warranty -- is a legitimate perspective when incorporated into the working drawings.

Post-Window Change Request

If the owner returns drawings with comments which serve to initiate a change after the owner's window of opportunity has closed, the shipyard has to assess the status of the potentially affected work. That assessment is to determine whether the change can still be undertaken at minimum cost, or if some rip-out of already-completed work will now have to be accomplished in order to accommodate the change request. Because the owner's window of opportunity to achieve the change or the alternate interpretation of the contract workscope at minimum cost has closed, the owner must be prepared to pay for a change which he may not have had to pay for if he returned the drawings earlier -- or perhaps pay less for the change than he will now have to pay for it.

Conversely, merely because the owner has made a 'late' request, the shipyard cannot automatically charge the owner for a 'change' if, in fact, the involved installation work had not already begun. For larger items which may be the subject of an alternate interpretation of contract workscope, however, the owner has to be aware of the lead time required to implement the work between the expiration of the time to submit comments and the shipyard's actual installation. If the owner 'infringes' on some intermediate activities, merely because the equipment is not yet installed does not mean that the actions of the owner, if accepted, will not impact the shipyard. The situation has to be examined on a case-by-case basis. The bottom line is that if the ship owner fails to submit comments pertaining to the drawings on a timely basis, the owner risks having to compensate the shipyard to accommodate his comments or risks receiv-

ing his ship without incorporating those comments into its final configuration and content.

None of this appreciation of the significance of the window of opportunity precludes the shipyard from starting the work before the window has closed. If the shipyard is behind schedule, the yard can take a risk regarding a minimum-cost change by starting to install the compressor, or other items, before the turn-around time for drawing approvals has expired.

If the shipyard is fairly certain that the owner will not request an alternate interpretation of the contract workscope, then the risk of hasty installation will have paid off. If, on the other hand, the shipyard starts to install the compressor 8" from the bulkhead stiffener before the window has closed, and if the owner requests the compressor be installed with 12" clearance, then the shipyard will have to absorb the costs of physical relocation that would not have been incurred if the shipyard waited until the turn-around window had closed.

Non-Obvious Changes

Another potential scenario pertaining to the approval or review of working drawings arises when, on a timely basis within the 'window,' the owner requests the shipyard to use an alternate interpretation of the contract workscope. The example would be, as before, the placement of the compressor 12" instead of 8" from the bulkhead stiffener. The shipyard may point out that the 4" difference is not a no-cost change due to non-obvious considerations.

One such consideration could be the concern for stiffness of the deck beneath the compressor. Since it was going to be 8" from the bulkhead stiffener, the deck would be sufficiently stiffened to mitigate against the development of unwarranted vibration. However (the shipyard may say), at 12" from the bulkhead stiffener, vibration becomes a concern; so either a deck doubler plate or underdeck stiffener would have to be added.

Thus, the owner's interpretation of the workscope is no longer a minimum-cost solution

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that satisfies the contractually defined workscope. If the owner concurs that the vibration problem could be a legitimate concern if the compressor is mounted at that greater distance, the owner will then have to compensate the shipyard for that extra cost of the doubler plate or underdeck stiffener to achieve that greater clearance. Similar concerns may arise over other details which evolve during development of the working drawings.

Rejection of Working Drawing

Occasionally the owner may opine that some particular details in the submitted working drawing are not consistent with the contract workscope -- usually an omission, an undersizing or use of lower-grade materials. The owner's comments on the returned drawing will essentially challenge the shipyard's interpretation of the workscope as represented on that particular working drawing.

There is nothing wrong with asserting such a challenge. However, the challenge cannot be based simply on the concept of 'first class marine practice' or some ill-defined phrase. The owner has an obligation, if such a challenge is to be successful, to identify with precision the contract specification item and/or the section of a contract drawing with which the working drawing does not agree.

Guidance Plans or Drawings

Some contracts for ship conversion or construction include reference to the Contract Specifications, Contract Plans (or Contract Drawings) and Contract Guidance Plans. Due to a lack of clarity as to the role of them, the use of guidance plans is generally an invitation to initiate a contract dispute.

Often, the owner's rejection of a working drawing is based on the failure of the working drawing to comply with the Contract Guidance Plans. Unfortunately, it is often not clear from contract wording whether such compliance is required.

Contract Guidance Plans are usually offered by an owner when the owner has a par-

ticular form of 'solution' in mind that will satisfy the contract specs & plans, but which level of detail is not shown in the contract specs & plans. Thus the owner is attempting to impose one of several possible 'solutions' onto the shipyard.

Sometimes the owner will allow the shipyard to utilize an alternate 'solution' if the shipyard can show that its solution is equal to the owner's solution. But the proof of what constitutes 'equal' is ill-defined.

At other times, the owner is more complacent, merely identifying the Contract Guidance Plans as one of several possible solutions which the shipyard may wish to consider. This leaves the shipyard wondering why such plans are even mentioned in the contract, as opposed to being informally transmitted from the owner. The fact that they are specifically mentioned in the contract cannot be wholly ignored by the shipyard.

The most common problem with the use of Contract Guidance Plans is that they are usually partial or incomplete, and do not contain sufficient information on which the shipyard can base part of its bid. Prior to development of working drawings, however, the shipyard cannot reasonably know that the offered guidance plans are only partial or incomplete. Consequently, the shipyard is surprised to find 'extras' arising during the development of the working drawings.

The net effect that this has on drawing approvals is that the owner must tread carefully if the working drawings are going to be rejected, in whole or in part, due to non-compliance with Contract Guidance Plans.

Back-Door Guidance Plans

Contract Guidance Plans are sometimes created out of otherwise firm contract plans by the existence of an ambiguous phrase, even though the word 'guidance' is never used. Consider this example of wording from a contract.

"The ship shall be constructed in accordance with the plans listed below. Drawings marked with an asterisk may not be departed from except with prior agreement

by the Purchaser. The other drawings show arrangements, data and equipment which are subject to developments and refinements by the Contractor pursuant to requirements of applicable sections of the Specifications." [Only the six general arrangement plans and the one lines plan had asterisks. The other 56 plans did not have an asterisk.]

This is a strong, negative example of how an ambiguity effectively created guidance plans out of otherwise firm contract plans and established the grounds for a dispute. First the clause states that the ship must conform to the listed plans. Then the clause invites the shipyard to consider departures from the 56 contract plans (of 63 total) that do not have asterisks. Moreover, it appears that the shipyard does not need to obtain approval for departures from any of the 56 plans without asterisks. This very 'loose' approach is an invitation to commence disputes. Both the shipyard and the owner should have resolved that potential ambiguity prior to contract award. Their failure to do so contributed to a long and costly contract dispute.

Although this has been only a brief discussion pertaining to guidance plans, perhaps the reader can appreciate that to minimize the opportunities for disputes arising at the time of review or approval of working plans, the designation of plans as Contract Guidance Plans should be avoided; the plans should either be firm, complete contract plans, or should be transmitted to the shipyard on an informal basis.

Third Party Drawing Approvals

Regulatory agencies and classification organizations, having no vested interest in the 'product' of the contract, are both considered as third parties to the contract, since the contract is between the first two parties, i.e., the Buyer/Purchaser (owner) and the Contractor (shipyard). Since compliance with the regulations and standards of those third parties must be achieved before the ship is delivered (or re-delivered if a vessel modification is involved), the treatment of drawing approvals pertaining to

each of them is essentially the same, but there may be minor exceptions to the parallel treatment. Accordingly, the roles of the regulatory agency and classification organization pertaining to drawing approvals, which drawings are also subject to review by either of those third parties, will be considered together.⁴

One potential function of drawings being transmitted to the owner by the shipyard is to ensure compliance with regulatory agencies' and classification organization's requirements, such as Coast Guard regulations and ABS or Lloyd's standards. The first question that must be addressed is, which party has contractual responsibility to ensure compliance with regulatory requirements or classification standards? This is not as easy to answer as may be initially suggested by the contract. Of course, reading the contract is essential to understanding the allocation of this responsibility.

Assignment of Third-Party Approval Responsibilities

If the contract is for construction of a new vessel or for substantial modification or reconstruction of an existing vessel, the contract language will usually assign to the shipyard responsibility to ensure that the shipyard's detailed arrangements and materials selected by the shipyard achieve compliance with those regulations and standards. Thus, in that instance, it is recognized that the shipyard will have to transmit to the regulatory agency or classification organization the requisite information, usually in the form of drawings.

If the contract is for minor modifications of an existing vessel, the contract language will

⁴ The role of a classification organization in establishing its standards is quite different from its role in confirming compliance with its already-developed standards. This first subject has been addressed in: Young, Robert T., "The Role of the Classification Society in Relationship to Design Responsibility." SNAME Transactions, Vol. 81, 1973, p.177.

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sometimes be silent on the issue of which party transmits to the regulatory agency and/or classification organization the necessary information. In that case, since the vessel owner has established a pattern of communication with the regulatory agency to certify continuing compliance with applicable regulations, the lack of contractual assignment of such responsibilities to the shipyard means that the owner continues to be responsible for such communications. The same would be true for the relationship with the classification organization.

A careful distinction must be made, however, in the case of new construction or major modification, between (a) the shipyard's responsibility to elicit approval of the regulatory agency and classification organization, on one hand, and (b) the shipyard's responsibility to absorb the cost for all contract changes arising from regulatory requirements, on the other hand. The key to resolving these possible sources of conflict is the matter of 'representations' made in the contract specifications and drawings.

Assumption of Completeness When Shown in Contract Drawings

A shipyard should be allowed to rely on the assumption that the bid specifications and drawings prepared by the owner on which the shipyard bases its bid have been prepared by a professionally competent naval architect and marine engineer. Accordingly, to the extent that the specifications and drawings include details which are otherwise covered by regulatory requirements and classification standards, the bidding shipyard is allowed to assume that those details are consistent with the requirements and standards. If it later turns out that the regulatory requirements or classification standards exceed the extent specifically shown in the contract specifications and drawings, the owner will be responsible for the extra costs and schedule impact, assuming the shipyard identifies the need for those 'extras' on a timely basis.

If, however, the bid specifications and drawings are silent with respect to such details, it is incumbent upon the shipyard, after contract

award, to incorporate those salient features into the Work (or 'product') in accordance with the regulatory requirements and classification standards at no additional cost or schedule impact.

Example -- Fire Dampers

As an example, suppose the contract includes language to the effect that the Contractor (i.e. shipyard) shall accomplish the Work and provide all materials in accordance with a particular classification organization, obtain the approvals of that organization, and deliver the vessel in 'class' per that classification organization. Assume for the moment that the contract specifications mention 'fire dampers' in the ventilation system, but the contract specifications and drawings are silent with respect to the placement and number of fire dampers. It is then the responsibility of the shipyard to incorporate into the final product all of the fire dampers that are necessary to achieve classification approval, regardless of the cost.

In other words, under those conditions, at the time of bidding the shipyard will have to use its own naval architects to establish the number and placement of fire dampers that will be included in the Work, and include them in its bid. This requirement arises from the combination of (a) the requirement that the ship be delivered in class, and (b) the absence of any particular number and placement of fire dampers in the contract specifications and drawings.

On the other hand, if the owner's bid specifications and drawings show a particular number, 'F,' of fire dampers, then the shipyard will have to include only that number of fire dampers in its bid. If, in order to gain classification approval, the shipyard must install a greater number of fire dampers, then the owner will be responsible for the cost of that greater number. This arises because the owner made an explicit representation as to the number, and possibly the location, of the fire dampers.

Misunderstandings of contract responsibility usually begin to arise at this point because the shipyard believes that the extra fire

dampers are the owner's responsibility and the owner refuses to consent to a change order; but the shipyard cannot refuse to install all of the required fire dampers since the ship must be completed and delivered 'in class.' This then initiates disputes over constructive or essential changes. By reviewing the above comments, however, perhaps such disputes can be avoided if the owner either leaves it to the shipyard to determine the proper number of fire dampers, or faces up to the fact that the owner's naval architects mis-interpreted the classification rules pertaining to the number and placement of fire dampers when developing the bid specifications and drawings.

One other point is that if classification standards turn out to be for a fewer number of fire dampers than 'F' as shown in the contract specifications and drawings, the shipyard is still obligated to install 'F' fire dampers since it is the owner's prerogative to exceed classification standards without explanation if that 'excess' is identified in the contract specs & plans.

Obviously, the same allocation of responsibilities will arise for matters other than fire dampers.

Limited Interaction Between Owner and Third Party

The owner's review, vis-a-vis regulatory requirements and classification standards, of drawings produced by the shipyard in the process of developing the details for construction, provides a mechanism for the owner to compare (a) the shipyard's means of achieving the classification requirements with (b) the means anticipated by the owner's naval architects per the contract specifications and drawings.

It is more important to appreciate what the owner's review of the shipyard's drawings, vis-a-vis classification requirements, does not accomplish. It would be a mistake for the shipyard to assume that the owner's review will be sufficient to find any omissions pertaining to classification approvals. If the contract language assigns to the shipyard the responsibility to

develop the working drawings, procure materials and deliver the ship in accordance with classification requirements, the owner's review of the drawing does not serve as a waiver of that requirement, or an excuse for any lack of professional diligence by the shipyard.

If the shipyard inadvertently omits a feature that is required for classification approval, and if the owner's review of the drawing fails to find that omission, the shipyard cannot suggest at a later time that the late addition of that feature constitutes a constructive change. This assumes, of course, that the owner has not inadvertently made a misrepresentation in the bid specifications and drawings pertaining to regulatory requirements or classification standards.

In nearly all cases, an error or misrepresentation by the owner in the bid specifications and drawings will be attributable to the owner. The common rule is that if an error or ambiguity in the contract specifications and drawings leads to extra work or schedule impact, the party that drafted the erroneous or ambiguous specifications and drawings will be accountable for the costs and schedule impacts, subject to the 'mitigation of damages' rule.

Re-Visited Interpretations

Another potential confusion of responsibility arises when either the regulatory agency or classification organization alters its own interpretation of requirements or standards after having given approval to the shipyard. The rule to follow, however, is quite straight-forward: whichever party to the contract has responsibility to identify (not just to comply with) the requirements or standards will be the party that is responsible for the costs and schedule impacts of the reinterpretation of the requirements or standards.

Again, using the fire dampers as an example, if the owner's naval architects were correct in determining that 'F' fire dampers would be needed in accordance with interpretation by the local office of the classification organization,

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but if the national office later re-interprets the standards for the particular design, then the owner will have to bear the consequences for having mis-represented the ultimately acceptable number of fire dampers.

On the other hand, if the contract s-&-d's were silent with respect to the number and placement of the fire dampers, then the shipyard will be responsible for the costs of achieving all the compliances necessary to have the vessel delivered in class.

Post-Award Third-Party Changes

There is another potential 'glitch' in the definition of contract workscope which can arise in association with either regulatory agencies or classification organizations. It is easily appreciated that the contract workscope that is to be the 'product' of a fixed-price contract is also fixed at the time of contract signing -- i.e., a fixed-price contract must be for a fixed workscope defined by the contract specs & plans.

Occasionally, between the time of contract signing and delivery of the 'product,' a regulatory agency or classification organization may change the requirements to satisfy the regulations or standards. Although such changes usually do not apply to vessels already under contract, there are exceptions which may have to be incorporated into as-yet undelivered vessels. This form of post-award development usually occurs, if at all, on new ship types or in technically innovative applications on existing vessel types.

While the shipyard may be contractually obligated to deliver the vessel in full compliance with the applicable regulations and classification standards, the shipyard reasonably could not have included such new requirements or new interpretations of old requirements in their bid price. As a consequence, the shipyard is in a bind -- the shipyard has to incorporate the new requirement or interpretation, but the owner may not acknowledge that it constitutes an expansion of workscope.

The result is that the shipyard must incorporate such new requirements into its 'product' and the owner will have to compensate the shipyard for such new requirements if they do, in fact, add to the workscope. This may be considered as a necessary or "essential" change. It has the same potential for causing disputes as do incorrectly-defined regulatory and/or classification requirements in the owner's bid specs & plans.

However, the shipyard cannot abuse the notion of new or extended interpretation of regulations or classification standards merely to 'capture' a new contract change. Before it can be acknowledged by the owner as a legitimate change, the shipyard will have to demonstrate that it had already planned to accommodate some other reasonable interpretation of regulations or classification standards which the shipyard is no longer allowed to utilize.

Third-Party Delays

A common occurrence is a longer-than expected turn-around time for approvals by one of the involved third parties. The shipyard may feel that it does not want to proceed with production work until the yard is confident that the regulatory agency or classification organization will approve the details of its working drawings. When the production work is held-up due to such delays, the shipyard may look to the owner for additional compensation due to the impact of that delay, since the shipyard had no contractual choice as to the source of third-party drawing approvals.

Such a position by a shipyard, when it has responsibility to obtain those approvals, is not supportable by either contract law or industry practice in view of the following considerations.

The shipyard has accepted the contractual obligation to produce working drawings that satisfy the applicable regulatory requirements and classification standards. That acceptance constitutes a representation to the owner that the shipyard knows how to achieve the approvals of the regulatory agency and classification

organization. Since the shipyard knows and understands the requirements it must fulfill, the approval by those third parties constitutes only a confirmation of the 'skill' of the shipyard to have its product conform to the applicable requirements and standards.

If the shipyard is confident of its skills and is thus equally confident it will receive the approvals, then the shipyard should not hesitate to proceed even though the third-party approvals may not have been formally issued yet. On the other hand, if the shipyard is not sure its working drawings will satisfy the third parties, then the shipyard is not honoring the contractual representation it made to the owner.

Normally, the owner will not have interfered with the shipyard's process of obtaining approvals. Since the owner has left the shipyard to its own devices to obtain the approvals that the shipyard said it could and would obtain, the shipyard cannot 'penalize' the owner by asking for delays or increased costs.

Occasionally the shipyard will ask the owner for a change to accommodate the shipyard's methods of production, which change also involves approval by a third party. Such a change in contract workscope is being considered for the benefit of the shipyard. Accordingly, the ship owner cannot be held responsible for third-party approval delays or extra costs incurred because the shipyard wanted to alter the form or style of the deliverable contract work product -- the ship -- to benefit the shipyard.

Changes

Often the shipyard's submittal of a working drawing to the owner is the event which initiates the owner's request for a change. If the requested change to the working drawing is a minor one, still consistent with the contract workscope, it will not constitute a contract change. When the requested change is more significant, the shipyard will notify the owner that the owner's comments on the working drawing necessitates a contract change. Subsequently, per procedures required by the contract's

changes clause, the shipyard will submit a priced, proposed contract change for approval by the owner. If the owner decides the requested change is not cost-effective, the proposed contract change will not be signed.

Sometimes, however, shipyards interpret the owner's comments as a mandate for a change. Consequently, the shipyards initiate the changed workscope without having an owner-signed contract change. Later the shipyard submits a priced contract change form *ex post facto*, and is then surprised that the owner declines to sign for an already-accomplished change of workscope.

The shipyard's motivation for commencing the changed workscope before obtaining the owner's formal consent to a priced change is often well-intentioned. By commencing the work at an early time, less rip-out of pre-change work may be necessary, or re-mobilization into the affected area may not be necessary. Despite that intention, it creates risks and represents an improper unilateral change in contract workscope. The shipyard has no excuse to not continue the existing contract workscope in anticipation of a change.

Careful distinction must be made as to how the working drawing is returned to the shipyard. If the owner has 'approved' the drawing but added a comment which leads to a change, the shipyard is clearly authorized to proceed with the approved work, treating the comments as the basis for the subsequent development of a contract change.

The owner can reject the working drawing if it is not consistent with contract specs and plans. But if the owner has disapproved the working drawing due to a possible change, the contract language pertaining to the submittal of working drawings is no longer controlling the process. Rather, the changes clause is controlling since a change is now being introduced by the owner. The owner may have effectively forfeited his opportunities associated with the review of that drawing. The relevant portions of

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the changes clause may include language such as this.

"The Purchaser shall have the right to propose to the Contractor a non-essential change in the contract work. The Contractor shall promptly review such proposal and submit to the Purchaser a detailed estimate of the net increase or decrease of the contract price. ... The Contractor shall have the right to continue production on the basis of the Specifications and Plans until agreement of a change in contract price and Delivery Date has been reached in accordance with this section. ..."

If the shipyard proceeds with a change to the contractually-defined workscope before obtaining a formal change in contract price, the shipyard has taken a needless risk. While that is not the responsibility of the owner, the situation can be avoided if the owner's standard wording on the letter which accompanies his comments includes a reminder that the comments do not authorize any changes to contract workscope.

There are numerous additional connections between the shipyard's working drawings and factors initiating contract changes. The numerous permutations that could be considered to address those relationships justify a separate paper, thus are not addressed here.

Defining Types of Days

The wording of a contract (including the specifications) may vary, but we will assume that the Shipyard has a reasonable basis to expect the owner will return the drawing with appropriate comments within "X" days.

When planning to achieve or utilize that X-day limitation, the parties should consider what 'type' of days are included in the counting. Both parties to the contract will have a particular type of day in mind. If the contract does not clarify the type of days that are included in the counting, one party should write a letter to the other party, advising them of the type of days considered to be included in that counting, stat-

ing the basis for that choice, and asking them to reply, concurring with that clarification of the potential ambiguity in the contract.

A possible -- though not preferable -- definition of the 'type' of days could be something like this:

The term 'days' shall mean weekdays only, excluding Federal and state holidays, unless otherwise clarified, except that changes or amendments pertaining to completion of the contract Work or pertaining to delivery of the Vessel shall be expressed in calendar days without exceptions.

That definition of 'days' is not preferable because it establishes a dual standard, which is certain to cause confusion in multiple instances. For that reason, a 'clearer' or less ambiguous definition of 'days' merits consideration.

The terms 'days' and 'working days' shall mean calendar days, excluding Saturdays, Sundays, Federal and State holidays.

Even this relatively 'clear' definition of 'days' may lead to confusion when the contract requires the delivery of the Vessel in a stated number of calendar days. There is a potential for confusion of the term 'calendar days' with the definition of 'days' which starts with calendar days but then lists exceptions. However, this last form of potential confusion usually arises only when it reflects some party's need to gain time for some reason.

If both parties have negotiated the contract on the expectation that the shipyard will work a 6-day week in order to accomplish a shorter period for delivery of the Vessel, the word 'Saturday' may be eliminated from that definition of 'days.'

Subtleties in Counting Days

Both parties should be alert to the impact of changes on the scheduled delivery of the vessel. When an agreed-upon change order includes a change of delivery date as well as a change in contract price, the change order form

