

GENERAL DYNAMICS

Electric Boat

SQ/08-61
January 19, 2009

Subject: Visual Inspection of Welds – Lessons Learned

Dear Valued Supplier:

The purpose of this Lesson Learned Letter is to raise awareness of the importance of performing a thorough visual inspection (VT) of completed welds and to share a recent issue involving VT noncompliant welds found within a delivered component.

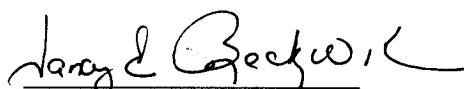
A recent inspection performed by Ship's Force personnel found several localized weld areas that did not conform to the required visual inspection standards. The nonconformances involve areas of weld pickup, end raps and tie-ins (starts and stops) on welds requiring final VT inspections in accordance with Mil-Std-278.

The welds involved were class A-4, for which Mil-Std-278 does not require record documentation of the VT inspection. In addition, Electric Boat purchase orders for this and similar Mil-Std-278 / Tech-Pub-278 welding typically invoke standard clause 76-22H, which in the case of class A-4 welds, does not require individual certification of the weld's VT acceptance. Standard clause 76-22H allows the supplier to submit a single certification of conformance statement for all class A-4 welds within the order. Although fabrication specifications such as Mil-Std-278 / Tech-Pub-278 and Electric Boat purchase order requirements may not always specify the need for objective quality evidence in support of an inspection, a complete and thorough inspection is still always required to ensure a quality product.

As a reminder, be advised that military standards invoke inspection criteria as a means to provide assurance that the material supplied can meet our customer's design requirements. A thorough VT inspection of welds is critical to that goal.

Please share this Lesson Learned Letter with your sub-tier supplier(s) that may be performing visual inspection of welds. Any questions concerning the above can be forwarded to Robert Sommers of Electric Boat Supplier Quality at (860) 433-3395 or E-mail rsommer2@gdeb.com.

Very Truly Yours,



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Approved for Public Release

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