



DEPARTMENT OF THE NAVY  
NAVAL SURFACE WARFARE CENTER  
CARDEROCK DIVISION

NAVAL SHIP SYSTEMS  
ENGINEERING STATION  
PHILADELPHIA, PA 19112-5083

9245  
WORK CENTER ID  
Ser 932/078

Diehl Engineering Company  
PO Box 1573  
Kingston, WA. 98346

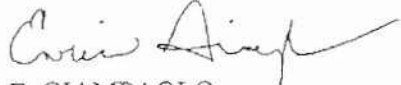
APR 22 2004

**SUBJ: DIEHL ENGINEERING STRAIN GAGE SHAFTING ALIGNMENT  
CERTIFICATION REQUEST**

Naval Sea Systems Command (NAVSEA) S9086-HM-STM-010/CH-243 requires that shaft alignment strain gage assessments be accomplished by representatives from Carderock Division, Naval Surface Warfare Center (NSWCCD-SSES), Fleet Technical Support Center, Atlantic (FTSCLANT), or Fleet Technical Support Center, Pacific (FTSCPAC) or by personnel trained/certified by NSWCCD-SSES using approved procedures. For ships with resiliently-mounted reduction gears, the strain gage method is the only acceptable method for measuring main propulsion shafting system alignment.

As reported during a telephone conversation between FTSCPAC, Code 302 (J. Larson) and NSWCCD-SSES, Code 9323 (J. Reed) of 16 March 2004, Eric and Rob Diehl of Diehl Engineering Co. have demonstrated the ability to be proficient performing shaft alignment assessments using the strain gage method of analysis on US Naval and Coast Guard Ships. FTSCPAC personnel witnessed Diehl Engineering perform shipboard strain gage installation and measurement methods on US Naval Vessels on more than one occasion. FTSCPAC also verified that the results of Diehl Engineering's method compared well to those obtained using the US Navy methodology within reason. FTSCPAC, Code 302 personnel recommend that Eric Diehl and Rob Diehl of Diehl Engineering Co. be certified to formally perform and analyze strain gage alignment assessments on US Naval Ships.

NSWCCD-SSES Code 9323 acknowledges the subject request and considers Eric and Rob Diehl of Diehl Engineering Co. to be certified to install and perform main propulsion shafting system alignment measurements on US Naval Ships using the strain gage method. Questions concerning this subject can be directed to Mr. John Reed, NSWCCD-SSES Code 9323, 215-897-7318, or email [reedjc@nswccd.navy.mil](mailto:reedjc@nswccd.navy.mil) or Michael Bouve, NSWCCD-SSES Code 9323, 215-897-7958, or email [bouvems@nswccd.navy.mil](mailto:bouvems@nswccd.navy.mil).

  
E. GIAMPAOLO  
By Direction

Distribution:  
SWRMC 937