



**DEPARTMENT OF THE NAVY**  
**NAVAL SURFACE WARFARE CENTER**  
**PHILADELPHIA DIVISION**  
**5001 SOUTH BROAD STREET**  
**PHILADELPHIA PA 19112-1403**

IN REPLY REFER TO:

9243

Ser 427/005

DEC 19 2019

Mr. Zac Schramm  
Project Engineer  
LamaLo Technology, Inc.  
6645 Oakridge Road,  
San Diego, CA 92120

Dear Mr. Schramm:

**SUBJECT: STRAIN GAGE SHAFTING ALIGNMENT CERTIFICATION OF CS MARINE  
and RAMTEC PERSONNEL**

Naval Ships' Technical Manual Propulsion Shafting, NAVSEA S9086-HM-STM-010 Chapter 243 requires that shaft alignment strain gage assessments only be accomplished by representatives from Naval Surface Warfare Center, Philadelphia Division (NSWCPD), South West Regional Maintenance Center (SWRMC), Mid-Atlantic Regional Maintenance Center (MARMC), or by personnel trained or certified by NSWCPD using approved procedure and practices. For ships with resiliently-mounted reduction gears, the strain gage method is the only acceptable method for measuring main propulsion shafting system alignment. Email from LamaLo Technology Inc. personnel Zac Schramm, to NSWCPD Code 427, Greg Dobbs of 23 January 2019 requested the certification of individuals from shaft alignment contractor Ramtec and CS Marine as strain gage installers utilizing strain gages in the measurement of bearing reactions.

On 27 February 2019, NSWCPD Code 427 representatives (G. Dobbs and C. de la Pena) visited Fincantieri Marinette Marine in order to witness and certify specific personnel as strain gage installers. All individuals demonstrated the required knowledge and skills required to be certified as strain gage installers in accordance with Naval Ships' Technical Manual Propulsion Shafting, NAVSEA S9086-HM-STM-010 Chapter 243, while aboard USS Indianapolis (LCS 17). These personnel were previously trained by qualified LamaLo Technology representatives.

The following personnel listed below demonstrated the capability to properly apply strain gages for the measurement of bearing reactions in accordance with Naval Ships' Technical Manual Propulsion Shafting, NAVSEA S9086-HM-STM-010 Chapter 243 and Handbook, Bearings, Measurement of Load, NAVSEA S6420-AC-HBK-010.

Personnel Certified as Strain Gage Installer:

<u>Name</u>	<u>Employer</u>
Mr. Wesley Slanina	Ramtec
Mr. Steve Nabours	CS Marine
Mr. Dave Kieke	CS Marine
Mr. Andrew Nesberg	CS Marine
Mr. Daniel Nesberg	CS Marine

Sincerely,



JOSEPH J AMADORO  
Department Head  
Propulsion, Power and Auxiliary Machinery Systems  
By direction of the  
Commanding Officer

Copy to:  
NAVSEA (05Z2)  
SWRMC (263)  
NSWCPD (00, TD, 00E, 40, 42, 427)