



## CORROSION ELECTROLYSIS and SHOCK HAZARDS in the MARINA

### Corrosion, Electrolysis, and Shock Hazards in the Marina

Malcolm Morgan from Johnson-Hicks Marine Electronics will present a four hour seminar, including classroom and hands-on training, covering the often misunderstood topics of electrolysis, corrosion, shock hazards, and the potential liability for Harbormasters, Marina Owners, and Managers.

The seminar will cover existing electrical codes and regulations requiring waterfront facilities to do annual electrical inspections, and how to perform these inspections and keep appropriate records. Attendees will participate in hands-on training of basic testing methods utilizing the appropriate tools needed to monitor electrical systems and check for hazardous conditions.

Malcolm will also discuss how electrolysis and resulting corrosion affect dock systems, vessel drives, and other components, and how to respond to boat owner complaints regarding zinc consumption, corrosion damage, and threats of litigation. The day's program will also review the proper use of shore power connections, electrical cords, and adaptors, and methods of mitigating associated shock and fire risks.

Handouts and reference materials will be provided for all attendees.

#### SPEAKER

Malcolm Morgan, Manager, Sausalito Division, Johnson Hicks Marine Electronics

#### *Delta Seminar*

Thursday, May 19, 2016 | 9:00 am – 2:00 pm  
Rosa's at Tower Park Resort  
14900 West Highway 12, Lodi, CA 95242  
209.365.4693

#### *San Diego Seminar*

Tuesday, June 7, 2016 | 9:00 am – 2:00 pm  
Island Palms Hotel & Marina  
2051 Shelter Island Drive, San Diego, CA 92106  
619.222.0561

#### *Richmond Seminar*

Tuesday, May 24, 2016 | 9:00 am – 2:00 pm  
Marina Bay Yacht Harbor  
1340 Marina Way South, Richmond, CA 94530  
510.236.1013

#### *San Pedro Seminar*

Wednesday, June 8, 2016 | 9:00 am – 2:00 pm  
California Yacht Marina - Cabrillo Marina  
224 Whalers Walk, San Pedro, CA 90731  
310.732.2252

#### REGISTRATION

<i>Postmarked BEFORE or BY May 13, 2016</i>	<i>MRA Member Price</i>	<i>Non-Member Price</i>
First Attendee	\$119	\$139
Additional Attendees	\$94	\$114
<i>Postmarked AFTER May 13, 2016</i>	<i>MRA Member Price</i>	<i>Non-Member Price</i>
First Attendee	\$149	\$169
Additional Attendees	\$124	\$144

