



NEW ZEALAND MARITIME SCHOOL

**NZ Diploma Electro-technology
Year 1 ETO Cadets, ETR NZ Cert of crewing, 2019.
NZ2511-02.**

(STCW-78 III/1, as amended in 2010)

Course 942.469

**Electrical and Electronic Measuring Equipment, Basic Electrical Fault
Finding**

***Research each of the 2 Learning Outcomes and answer with your interpretation.
Use reading material provided on Canvas, library material or other suitable sources.
Where possible provide reference to the sources. Email back to the tutor when complete.***

Tutor: John lamb

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Student Name: _____

Student ID: _____

Date: _____

Aim:- Demonstrate knowledge and skills of safety requirements for working on shipboard electrical systems

Outcome 1 Demonstrate basic knowledge of the implementation of satisfactory safety procedures

Research into these topics and produce a structured assignment (*including references to web sites and photos/schematics*) to demonstrate your **basic** understanding of the construction and operational characteristics of the following:-

Shipboard LV and HV AC – generating – distribution and propulsion systems

Ships onboard DC grid – hybrid AC/DC - generating – distribution and propulsion systems

Your thoughts on future technologies for shipboard electrical - generating – distribution and propulsion systems

Examine a small selection of typical shipboard electrical equipment (eg – two engine room machines or equipment) to show a basic understanding of construction and operation characteristics.

Outcome 2 Demonstrating the use of appropriate test equipment and accurately interpret results

This outcome is covered by a written report:-

Examine the condition of a typical Three phase squirrel cage induction motor is evaluated using measuring instruments, use photos to support your findings.

Outcome 3 Demonstrate basic knowledge of procedures for the conduct of repair and maintenance in accordance with manuals and good practice

This section is covered through practice tasks in the Marine Worksop at Mahurangi campus, it also takes into account the machine-shop exercises completed at MIT south campus in March.

Demonstrating a basic understanding for use of machine tools, hand tools and power tools

End of assessment