# SECOND ENGINEER REG III/2
# ENGINEERING DRAWING

LIST OF TOPICS

A Engineering Communication
B Drawing Equipment
C Projection
D Assembly Drawings

The expected learning outcome is that the student:

General Note:

It is expected that students will be aware of, and work in accordance with, the British Standard BS 308.

## A Engineering Communication

1. Discusses the need for Engineering Drawing as a means of communication.

    1.1 States the need for:

        (a) single component detail drawings;
        (b) sub-assembly and assembly drawings.

## B Drawing Equipment

2. Discusses the use and care of drawing instruments.

    2.1 Demonstrates the use of the following:

        (a) Drawing Board;
        (b) Tee Square;
        (c) Set Squares (45* and 30');
        (d) Compasses;
        (e) Spring Bows;
        (f) Metric Scale Rule;
        (g) Pencils;
        (h) Eraser;
        (i) Protractor;
        (j) Dividers.

    2.2 States how the above instruments should be cared, for.

## c Projection

3. Discusses the use of orthographic projection in Engineering Drawing.

3.1 States the need for orthographic projection.

3.2 Explains the terms by reference to simple examples:

(a) 1st angle projection;
(b) 3rd angle projection.

3.3 Prepares drawings of simple components in both 1st and 3rd angle projections.

3.4 Repeats 3.3 above to include sectional views.

## D Assembly Drawings

4. Produces general assembly drawings from dimensioned isometric views of components comprising a common piece of marine engineering machinery.

4.1 Prepares general assembly drawings as identified at 4 above; scales, lines, dimensions, abbreviations, conventions and standard parts to be in accordance with BS 8888:2004 Technical Product Documentation and PD 7308