

LECTURE 17

Temporary adjustment of prismatic compass

- ⊙ The following procedure should be adopted after fixing the prismatic compass on the tripod for measuring the bearing of a line.
- ⊙ **Centering**: Centering is the operation in which compass is kept exactly over the station from where the bearing is to be determined. The centering is checked by dropping a small pebble from the underside of the compass. If the pebble falls on the top of the peg then the centering is correct, if not then the centering is corrected by adjusting the legs of the tripod.
- ⊙ **Leveling**: Leveling of the compass is done with the aim to freely swing the graduated circular ring of the prismatic compass. The ball and socket arrangement on the tripod will help to achieve a proper level of the compass. This can be checked by rolling round pencil on glass cover.
- ⊙ **Focusing**: the prism is moved up or down in its slide till the graduations on the aluminum ring are seen clear, sharp and perfect focus. The position of the prism will depend upon the vision of the observer.

OPERATION PROCEDURE

- Remove the corner and open out the prism and window, holding the compass as level as possible.
- Then focus the prism by raising or lowering its case until the divisions appear sharp and clear. If necessary with the needle on to its pivot.
- Holding the compass box with the thumb under the prism and the forefinger near the stud, sight through the objector station lowering the eye to read the required bearing as soon as the needle comes to rest naturally.
- The bearing read will be a forward bearing and normally a “whole circle” bearing clockwise angle between 0° to 360° .