

## Distance Measuring Equipment

1. Displays slant range in nautical miles
2. Greatest DME errors occur at high altitudes close to the DME station. Examples...
  - a. Flying at 6000'; indication directly over DME station would be 1 NM.
  - b. Flying at 24,000'; indication directly over DME station would be 4 NM
3. For practical purposes DME distance can be considered accurate as horizontal distance at 1 NM for each 1000' of altitude. Example:
  - a. Flying at 1000'- accurate as horizontal distance at distances greater than 1 NM.
  - b. Flying at 4,000'-accurate as horizontal distance at distances greater than 4 NM.
4. DME is selected by selecting the VOR frequency on the DME indicator.
  - a. DME operates in UHF frequency band (962-1213 MHz).
  - b. There are 126 DME channels.
  - c. Channels are automatically associated with a VOR so we get DME when we select the correct VOR or LOC (Deccatur) frequency.
5. DME has same ident as associated VOR.
  - a. VOR ident every 10 seconds
  - b. DME ident every 30 seconds
  - c. If the VOR ident is received only once every 30 seconds, DME works but the VOR is out of service.

d. If no ident is received either of the VOR or DME, then it is inoperative. Therefore, only way to positively identify a VOR or DME and to know if it's working is to receive the correct ident.