**Some Navigation Devices are:**

**Directional Gyro:** A flight instrument stabilized by a gyroscope that shows the direction of flight.

**IFR:** Instrument Flight Regulations.

The **Localizer** is a part of the ILS that transmits a signal to indicate alignment with the runway.

The **ADF** (Automatic Direction Finder) indicates a local commercial radio station, nearby the runway.

**Back Course:** An approach to a runway in an opposite direction to that from which a normal approach is made.

The **DME (**Distance Measuring Equipment) measures the distance between the aircraft and the next runway.

**ILS:** (Instrument landing system) An instrument approach system.

**Outbound:** To fly away from the radio facility.

The **VOR** is the VHF (Very High Frequency) Omni-directional Radio range. We use the Course Selector to control the VOR receiver that selects the desired radial from VOR.

**The Global Positioning System (GPS)** is a satellite navigation system that receives signals to compute aircraft global positioning, speed and time.

The **Radar Altimeter** provides crew with aircraft ground altitude when approaching and landing.

The **Meteorological Radar** main function is the detection of flight meteorological conditions in front of the aircraft.

**The Emergency Locator Transmitter (ELT)** is the equipment that provides automatic transmissions, by satellite, in case of aircraft collision.

**Some of the Computing equipment that are used nowadays are:**

The **Auto-Pilot** is a system designed for automatically maintaining a pre-set course.

**Computer:** A device used by pilots to solve navigational problems quickly.

The **Pitot-Static** System operates the flight instruments that sense the movement and pressure of outside air.

The **Pitot Tube** admits air to the instrument for measuring speed, and the Static Port is a lateral opening to obtain static air pressure.

**Static Port:** An opening to obtain static air pressure.

The **Data Bus** is a digital way that allows communication between several computers.

**The Bus Coupler** connects the data bus to all computers.

**Some Communication Devices are:**

The **Transponder** is an electronic device carried in an airplane that causes a distinctive pattern to appear on observing radar.

The **Receiver** is a radio device for receiving radio signals, and the Transmitter is for sending radio waves.

**Static** is an undesired noise on a radio.

**Transceiver:** A radio that is capable of sending and receiving message.

**Transmitter:** A radio device for sending radio waves.

**VHF** is an abbreviation for very high frequency.