**What are PABT?**

**The PABT**is conducted by the Air Force to choose candidates who want to join as pilot (Air Warrior) in Air Force Flying Branch.

PABT are the combination of written and machine tests.   This type of PABT is followed throughout the world by all nations to choose pilot or air warriors for their nation.  The way of this varies for various nations.

 For our country, this PABT is designed by our scientists of DRDO – Defense Research and Development Organization to deploy at AFSB’s (Air Force Selection Board) in Varanasi, Mysore and Dehradun.

**What is the aim of PABT?**

 This is specially designed by DRDO scientists mainly, is to find the candidate’s ability, presence of mind, control of his limbs and nerves, fast response, judging power.

i.e.   Its overall aim is to find our attitude and mind set potential by nature to become a pilot.

**Why they are conducting this PABT especially for Pilot branch?**

The above qualities are very much necessary for a candidate before training at Air Force Academies to mould them as a successful pilot during.

**Why it is allowed to attend this only once in the life time?**

The candidates are allowed to attend the PABT only once in their life time.

Since as per the results of various wars, it is said that a person who don’t have their natural attitude, personality and ability to become a pilot cannot be trained well as a successful pilot.  So only the candidates are allowed only once, to show their skill to become pilot.

Ok let we go to the assessment part,

During the assessment, The Air Force Officer explains to the candidate about the procedure, rules, how to handle and read those machines.   He explains very slowly and ensures that every candidate has understood about the procedure.  Also he asks the candidates two to three times to clear their doubts before allowing them to the assessment part.  Also we are given little practice from the officers about handling of these instruments before the assessment.

**NOTE: -** At this time we should clear our doubts and observe keenly about every instrument and its procedures.

 It is said by the experienced candidates who cleared the PABT as, **“if we observe the explanation of the officer clearly, then we can easily clear the PABT”**

Ok, let we come to the real scenario,

The PABT is divided into three major parts,

**i)**                    **Written Assessment or Instrument Reading**

**ii)**                  **The Light Control Test (LCT) or Sensory Motor Apparatus**

**iii)**                **Drum Test(DT) or Control of Velocity Test(CVT)**

**Comparison of Real life scenario with PABT :-**

**Car Driving Vs PABT**– Here, I want to compare the four wheeler (car) driving with PABT .  If we want to learn a four wheeler first, we are given training to read the speedometer readings, fuel meter readings and engine heat readings.  Since these are all the basics to know the status of the car while driving.

Like this we should be familiar with the instrument reading while operating a plane.  So there is a assessment called as Instrument Reading at PABT.

Also, after finishing this basic instrument reading at car, we start to drive the car. At this time we tend to learn the gear operations how to handle the clutch, the brake, and  the accelerator of the car.  For this we are making lot of practice to drive it correctly in road.

For this in PABT, we are assessed on how we are controlling the instruments by checking our attitude for flying.  To evaluate this attitude and controlling ability, the candidates are ordered to undergo the LCT and DT.

Friends, I hope that you all understood well about the motive of PABT.

Ok here we see in detail about every assessment in PABT,

**Instrument Reading:-**

This is a written type.  The aim of this assessment is to find the ability of the candidate to read different instruments in short span of time.  The images of different instruments with different readings are given in a paper.  The number of questions given here are 60 and time given to answer all these are only 20 minutes.

The instrument images given are of nearly six types such as follows:-

**i)**                    **Magnetic Compass**

**ii)**                  **Artificial Horizon**

**iii)**                **Altimeter**

**iv)**                **Turn and back indicator**

**v)**                  **Climb and Descent indicator**

**vi)**                **Air Speed Indicator**

Let we see in detail about each instruments,

**Magnetic Compass:-**

     The magnetic compass is used to find the direction at which we are.   We may see these types of instruments in our school, college physics labs.  This is used in most of the vehicles such as trains, four wheelers, air planes and ships.  So this is important instrument to measure the directions.

In real the compass needle usually points towards the north and south direction.  But in images i.e. the questions given In question paper, they show the images at different directions, it may of north, south, east, west,  north east,  south east,  north west and south west.  So be clear in choosing your answer.

**Artificial Horizon:-**

     The Artificial Horizon is an instrument which is used to find the altitude of the plane at both right and left wings of it.   i.e.  By using this instrument we can check our plane whether it is flying parallel to the base line (horizontal line) or sliding towards one end (left or right).

It is measured from 0 to 90 degree left and 0 to 90 degree to the right.  Just imagine the protractor which we used for our mathematical geometry in our school days.

**Altimeter:-**

     The altimeter is used to find the altitude of the plane at which it is flying.  It is usually measured from sea level.  There are three needles in this.  The smaller one indicates the height in 10000 of feet, middle needle indicates the height in 1000 of feet and the larger one indicates the height in 100 of feet.  The height is measured in feet, meters or yards.  All these needles move in clock wise direction.

**Turn and Back Indicator:-**

     This instrument is used to find, where the aircraft is turning.  The below image describes about the instrument view.  Note there is one white ended needle; we have to note this only.  i.e.  If the plane moves left means, this white ended needle will move to right and if the plane moves to right means, this white ended needle will move to left.

**Climb and Descent Indicator:-**

     This instrument is used to find the flying position of the Air Craft.  i.e. If the plane goes up while taking off from the run way means, the needle goes up in the meter and it goes down if the air craft is going to land on run way.

**Air Speed Indicator:-**

     The air speed indicator is used to find the speed of the air craft.  Usually the speed is measured in kilometers or miles per hour.  This speed is called as  I.A.S  - Indicator Air Speed.  The needle in this instrument moves in clock wise direction.  Refer the given image below to get an idea.  (It is similar to the speedometer of a vehicle.)

Ok, now let we move to the **Machine assessments.**

These are designed to find the aptitude of the candidate to handle the flight instruments and to become a pilot.

Here two machine assessments are conducted,

**i)**                    **Light Control Test(LCT) and**

**ii)**                  **The Drum Test(DT).**

**LCT:-**

The aim of this is to find the reflexes, mental alertness capabilities of a candidate.   It is used to find our co-operation between our hands, legs and mind.  Here a seat is given to the candidate and a screen is before them.  There are two light spots in colors red and yellow which are flashed off and on the screen.

The candidates are given clear explanation and practice demo for this by the officers.  Also we are given one time practice before attending this assessment.

The instruments given to them to do this machine assessments are:-

a)    **A hand operated stick** – This controls the movement of the spot of light on the screen in up and down movements.

b)      **Foot pedals** – There are two foot pedals at left and right.  The left foot pedals moves the movement of light to left and the right foot pedal moves the movement of light to the right side.

c)      **Light Lever**– The lever is provided which is to be handled by hand is used to on and off the light.  I.e.  When it is move forward, it puts off red light and when it is moved backward it puts off yellow light.

**NOTE: -** Three chances are given for this and the best performance of them is taken for consideration of their aptitude level.

**The DT or CVT:-**

This is used to find our capacity to control the velocity.  Here, there is a screen in which sequence of yellow dots or spots are coming from up to down. A knob is given to us which is very sensitive and this knob has to control over the red spot or dot on the screen.  Here our duty is to catch the yellow dots or light spots with our red dot or light spot using the control of the knob.  We get more points if we catch more yellow light spots.

 The following image shows about a sample of the screen,

[](http://4.bp.blogspot.com/-SXCwNOL7_rg/TrZ21yqWe9I/AAAAAAAAAZ0/KLynSmzV5Vk/s1600/Drum_Test.JPG)

If you play video games and computer games, then it will be some what easy for us to tackle this.  If we are free by mind with full self confidence and hear the instructions of the Officers before PABT, then we can easily clear this PABT

Here I gave and share my knowledge about PABT upto my extent, all the best friends.  Be an Air Warrior.