

4.3 Altimeter

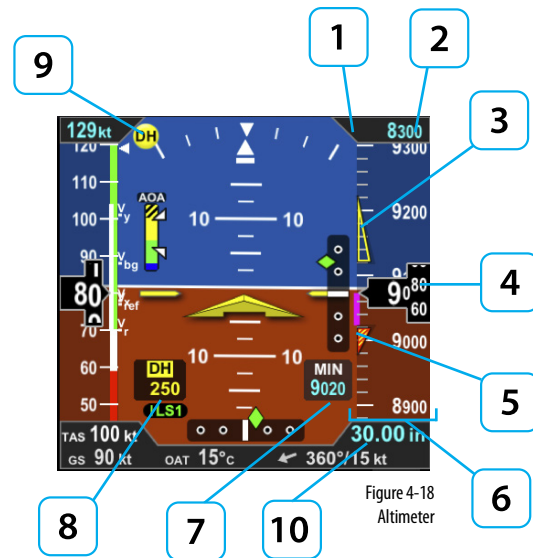
The altimeter consists of Numerical Altitude(drum), Altitude Tape, Altitude Trend Vector, MINIMUMS annunciation, Selected Altitude, Decision Height, Altitude Alerter and BARO setting (Figure 4-18).

1	Altitude Alerter	6	Altitude Tape
2	Selected Altitude Field	7	MINIMUMS Annunciation/ Selected MINIMUMS Field
3	Minimums Marker	8	Radio Altitude / Decision Height Window
4	Numerical Altitude Value	9	Decision Height Annunciation
5	Altitude Trend Vector	10	Baro

The Altitude Tape range is from -1,600 to 51,000 feet. Major tick marks are provided every 100 feet and minor tick marks every 20 feet. A barometric pressure adjustment (BARO) is provided to the pilot to accurately display the aircraft's altitude above mean sea level.

The Numerical Altitude Value is shown in a rolling drum format in the center of the Altimeter Tape, with numbers moving downward as the altitude increases and upward as altitude decreases. The Numerical Altitude Value shows the altitude to the nearest 20 feet.

An adjacent, magenta Altitude Trend Vector predicts the anticipated altitude, in the next six seconds, if the current rate of climb or descent is maintained. Like the VSI, there is a



WARNING

Always check and set the PFD BARO whenever the mechanical altimeter is adjusted



Figure 4-19
BARO Field Enabled

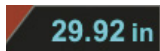


Figure 4-20
Baro Shown in Inches of Mercury

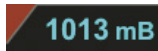


Figure 4-21
Baro Shown in Millibars

slight lag in the indication. If the ribbon meets or exceeds the display limit, the vertical trend is large. The Altitude Trend Vector does not display when the altitude remains constant.

If the altitude exceeds 51,000 feet, the Numerical Altitude Value is dashed, and the tape is frozen at this limit. All altitude information is removed and replaced with a red X with the textual annunciation of ALT FAIL when altitude data is invalid

4.3.1 Barometric Pressure Setting

Barometric units of measure adjustment may be made in either inches of mercury (in) or millibars (mB), as configured by the pilot in the Menu. The adjustment range is 28.10 – 30.99 inches Hg or 946 – 1049 mB.

Set the Barometric Pressure

1. Press the BARO Hot Key. The BARO label above the Right Knob and Barometric Pressure Setting Field appear in magenta (**Figure 4-19**).
2. Rotate the Right Knob to change the value of the Barometric Pressure Setting Field.
3. Press the BARO Hot Key or any knob, button/key to exit.

If no action is taken, after 10 seconds of inactivity, the label, and field are rendered in cyan.

Set Barometric Units of Measure

1. Press the MENU Button.
2. Rotate the Right Knob to select the GENERAL SETTINGS B page (**Figure 4-19**).
3. Press the BARO Menu Key. The Menu label turns magenta, and the EDIT VALUE label displays above the Right Knob (**Figure 4-19**).
4. Rotate the Right Knob to select either in or mB (**Figure 4-20** and **4-21**).
5. Press the MENU Button to exit.

4.3.2 Selected Altitude & Alerting

The Selected Altitude is displayed at the top of the Altitude Tape. The Selected Altitude Field range is 100 to 51,000 feet, in 100 foot increments. Additionally, the Altitude Bug is displayed adjacent to the Altitude Tape and at the Selected Altitude Field value when within the visible range of the current altitude.

Set Altitude Bug

1. Press the Right Knob until ALT displays above the Right Knob. The Selected Altitude Field and bug are enabled for editing, all rendered in magenta (**Figure 4-22**).
2. Rotate the Right Knob (clockwise to increase, or counterclockwise to decrease) to change the value of the Selected Altitude Field. Rotating the knob quickly will change the altitude in larger increments
3. Once the correct value is selected, and after 10 seconds of inaction, the field is disabled, and the label, field, and bug are rendered in cyan.

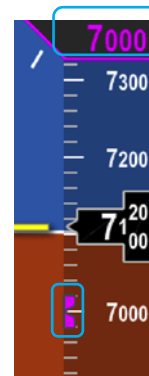


Figure 4-22
Altitude Bug and Altitude Alerter Enabled



Figure 4-23
Altitude Alert

NOTE

Since the altitude tape display is limited to approximately 400 feet, the altitude bug symbol is shown on the altitude tape when the Selected Altitude Field value is within the visible range of the current altitude.

Altitude Level-Off and Deviation Alert

The Altitude (level-off) Alert is ARMED and rendered on-screen as a yellow alert flag next to the Selected Altitude value when the aircraft altitude transitions to within 200 feet or 15 seconds of reaching the selected altitude (**Figure 4-23**). If an optional Sonalert tone generator device is installed, a one-second tone also sounds. Once the current altitude is within ± 25 feet of the Selected Altitude, the Altitude Alert extinguishes.

After reaching the Selected Altitude, if the aircraft's current altitude differs from the selected altitude by more than 200 feet, the yellow alert flag flashes. If an optional Sonalert tone generator device is installed, a one-second tone also sounds.

Altitude Audio Callout

When the aircraft altitude transitions to within 200 feet or 15 seconds of reaching the selected altitude, the audio alert sounds the voice message "ALTITUDE".

After reaching the Selected Altitude, if the aircraft's current altitude differs from the selected altitude by more than 200 feet, the audio alert sounds the voice message "ALTITUDE".