The Control Switches located on the front of the 300A do the following:

A/P. turns the 300A on or off.

Pull Turn. When pulled out and centered in the detent, the aircraft will fly what it thinks is wings level. When turned left or right, the aircraft will respond by flying in the selected direction. When properly adjusted, max turn will not exceed standard rate. The exact turn is determined by model of the aircraft and is spelled out in the alignment procedure. In other words, I couldn't just yank a 300A computer out of a Cessna 185 and install it in a Cardinal without performing the alignment procedure, even though the computers are the same.

Trim. Move the white trim control to compensate for variations in the aircraft trim or weight distribution. Be SURE to adjust the rudder trim prior to messing around with the Trim on this computer.

NAV. The pilot can select either a NAV 1 or NAV 2 tracking source. This source could be VHF Nav, Loran or GPS, depending on avionics installed and how the system is wired.

HDG SEL. The best part of the 300A is its capability to track the heading bug. Push in this button (Pull Turn pressed in) and the A/P will follow the heading bug.

NAV INT. In theory when the Nav Int button is pressed in, the 300A should fly the intercept course to the Nav data you have selected. In "Real World" it may do anything or nothing, depending on the 300A's mood at that time.

NAV TRK. Now this is important, so listen up. When the heading bug is set to the SELECTED course and the PULL TURN knob is pressed in, the aircraft may fly the selected course. I'll go into this subject in detail later but be advised the DG is part of the NAV TRK.

HI SENS. During NAV INT or NAV TRK usage, sensitivity of the 300A is enhanced to provide more precise operation. In the low-sensitivity position (button out), response is somewhat dampened for smoother operation. Normally when tracking a nav function, you'll want this button pressed in even though the POH says different.

BACK CRS. This function is available in the Localizer mode only. In a factory installation, when BACK CRS is pressed in it will reverse the direction of the needle on the selected navigation indicator. This allows the pilot to shoot the back course without the needles deflecting the wrong direction. For more information about back course discuss this with your local CFII. The localizer needle will only be reversed under the following condition. Back CRS button is pressed in, a localizer frequency is cranked in on the selected navigation indicator and the A/P is turned on. Aircraft that have upgraded radios may no longer have the BACK CRS feature.

HDG. When this button is pressed in, the A/P is now going to track the heading bug on the directional gyro. If the heading bug is not centered under the lubber line, then the A/P will turn in the proper direction, near standard rate turn to place the bug under the lubber line. As the bug comes near the lubber line located at the top of the directional gyro, the bank angle will decrease. Be sure to set your directional gyro to your calibrated wet compass on a regular basis. The knob on the right, bottom of the directional gyro sets the heading bug; the knob on the bottom left sets the compass card within the directional gyro when pressed in and turned.