**KAP 140 Auto Pilot Preflight. This is required prior to each flight.**

1. AVIONICS MASTER – ON

2. POWER APPLICATION AND SELF TEST -- if it passes you will hear the tone sounding.

3. MANUAL ELECTRIC TRIM. -- TEST as follows:

 a. LH SWITCH -- PUSH FORWARD TO DN position and hold. OBSERVE NO MOVEMENT of Elevator Trim Wheel. Release switch to Center OFF

 b. LH SWITCH -- PULL AFT to UP position and hold. OBSERVE NO MOVEMENT of Elevator Trim Wheel. Release switch to center OFF position.

 c. RH SWITCH -- PUSH FORWARD to DN position and hold for 5 seconds. OBSERVE NO MOVEMENT of Elevator Trim Wheel. Verify red "P T" light above AP button. Release switch to center OFF position.

 d. RH SWITCH -- PULL AFT to UP position and hold for 5 seconds. OBSERVE NO MOVEMENT of Elevator Trim Wheel. Verify red "P T" light above AP button. Release switch to center OFF position.

 e LH and RH Switch -- PUSH FORWARD SIMULTANEOUSLY and HOLD. OBSERVE MOVEMENT of Elevator Trim Wheel in proper direction (nose down). While holding LH and RH Switches forward PRESS and HOLD A/P DISC/TRIM INT Switch. OBSERVE NO MOVEMENT of Elevator Trim Wheel. Continue to hold LH and RH Switches forward and RELEASE A/P DISC/TRIM INT Switch. OBSERVE MOVEMENT of Elevator Trim Wheel in proper direction. Release LH and RH Switches to center OFF position.

 f. LH and RH Switch -- PULL AFT SIMULTANEOUS and HOLD. OBSERVE MOVEMENT of Elevator Trim Wheel in proper direction (nose up). While holding LH and RT Switches, PRESS and HOLD A/P DISC/TRIM INT Switch. OBSERVE MOVEMENT of Elevator Trim Wheel in proper direction. Release LH and RH Switches to center OFF position.

4. FLASHING BARO SETTING -- SET proper BARO setting manually (or press BARO to accept the present value)

5. AUTOPILOT -- ENGAGE by pressing AP button.

6. FLIGHT CONTROLS – MOVE fore, aft, left, right to verify the autopilot can be overpowered.

7. A/P DISC/TRIM INT Switch -- PRESS. Verify that the autopilot disconnects.

8. TRIM -- SET to take off position manually.

**FUEL SAVINGS PROCEDURES/ LEANING AFTER ENGINE START AND GROUND OPERATIONS. POH SECTION 4-28**

1. After engine start and for all ground operations, set the throttle to 1200 RPM and lean the mixture for maximum RPM. Leave the mixture at this setting until the BEFORE TAKEOFF checklist. After the BEFORE TAKEOFF checklist is complete re-lean the mixture as described above until ready for the TAKEOFF checklist.
2. Lean the mixture for maximum RPM during full throttle climbs above 3000 feet. The mixture may be leaned (maximum RPM at full throttle) for practicing maneuvers such as stalls and slow flight.
3. Lean the mixture for maximum RPM during all operations at any altitude, including those below 3000 feet, when using 75% or less power.