



GFC 500: ESP

Overview

- Electronic Stability and Protection
 - AP/ESP will disengage/not engage if roll is greater than 75 ° or Pitch is greater than 50°
 - Arms at 500' AGL when AP is **NOT** engaged (Requires height data from a GPS Navigator)
 - Disarm below 200' AGL when AP is **NOT** engaged (Requires height data from a GPS Navigator)

Enable/Disable G5

- Push the knob on the right hand side in
- Rotate the knob to highlight ESP
- Push the knob in to select ESP off



Enable/Disable G3X

- Menu
- Menu
- Flight controls
- ESP

Menu



Menu



Flight Controls



ESP



Activation

- When a Pitch, Bank, or Airspeed limitation is exceeded for 10 **CUMULATIVE** seconds out of a 20 second interval, AP will engage in level mode
- Level Mode as activated by ESP is not available until at or above 2000' AGL in a climb or at or below 1500' AGL in a descent
 - Level mode as activated by the level key is not limited by altitude

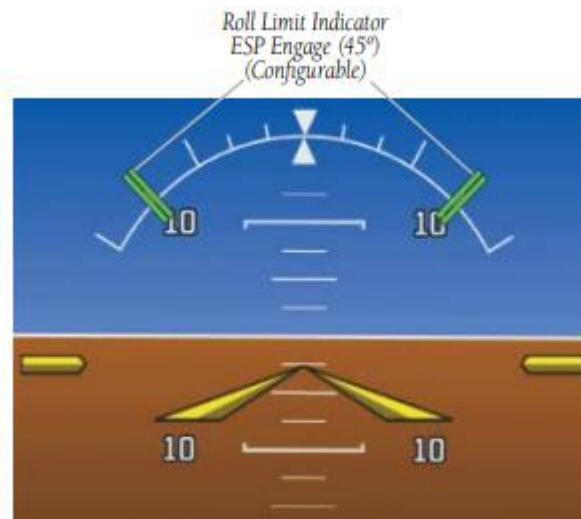


Figure 3-27 ESP Roll Engagement Indication (ESP Enabled but NOT Engaged)

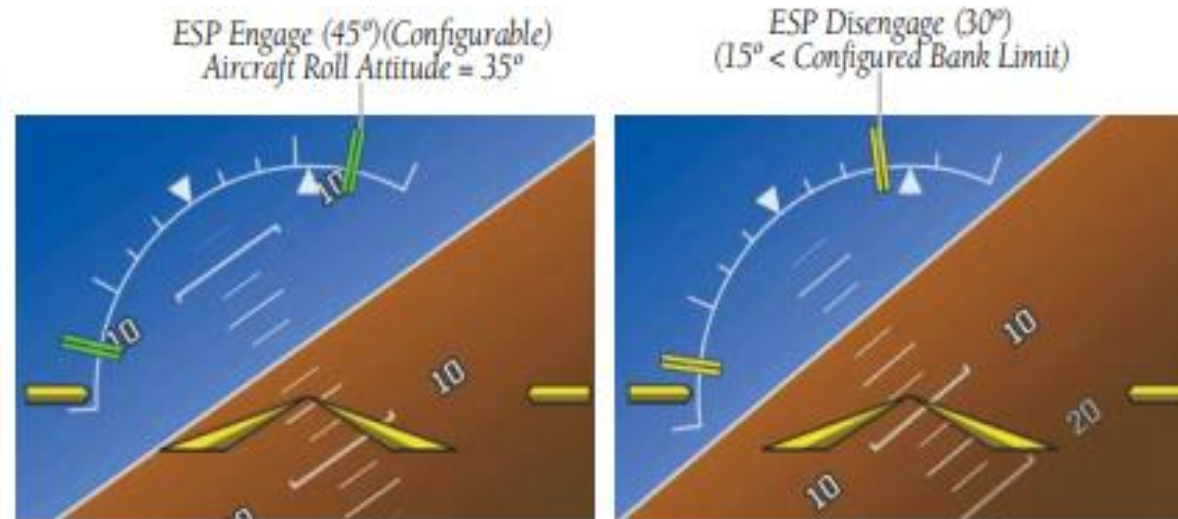


Figure 3-28 Roll Increasing to ESP Engagement

ESP Disengage (30°)
(15° < Configured Bank Limit)

Limitations

- ESP will activate level mode when the following are exceeded (172R/S)
 - Roll $>45^{\circ}$
 - Pitch $>20^{\circ}$ or $<-15^{\circ}$
 - ESP Airspeed: <50 KTS or >161 KTS
- ESP will activate level mode when the following are exceeded (Arrow)
 - Roll $>45^{\circ}$
 - Pitch $>20^{\circ}$ or $<-13^{\circ}$
 - ESP Airspeed: <70 KTS or >184 KTS
- If roll is reduced 15° below the activation degree of roll, ESP cumulative time period will reset
- If pitch is reduced to 5° less than the pitch up or increased to 5° more than the pitch down degree, ESP cumulative time period will reset