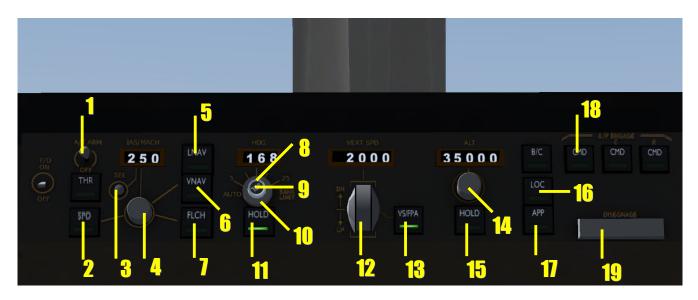***Guide to the 757 Autopilot and Autothrottle for FlightGear – by John Williams***

1. A/T ARM – Switch must be in the up position to turn on the autothrottle.

2. SPD – Push to turn the autothrottle on and off. A/T cannot be activated below 200 ft agl.

3. IAS/MACH selector – switch between IAS and Mach A/T modes.

4. A/T adjustment knob – in IAS mode, adjusts target speed in increments of 1 kt; in Mach mode, adjusts target mach in increments of 0.001 mach.

5. LNAV – Follow the flight plan specified in the route manager. *Note: a minimum of two (2) points must be specified in the route manager for LNAV to work properly. The departure and arrival airports are sufficient. "INVALID ROUTE" will appear on the EICAS display if fewer than two points are specified. When using LNAV mode with closely spaced waypoints and frequent turns (such as the end phase of RNAV STAR), monitor your speed closely. Flying too fast can cause you to miss waypoints and may lead to unpredictable AP behavior.*

6. VNAV – Hold and change altitudes as specified in the route manager flight plan. *Note: VNAV only looks ahead to the next waypoint. It is designed to make minor altitude adjustments during the cruise phase of the flight. It does not control vertical speed or pitch angle, and therefore is not equipped to properly manage the climb and descent phases of the flight. When VNAV activates FLCH mode, target altitude cannot be changed until system returns to VNAV mode.*

7. FLCH – Climb or descend to target altitude shown in ALT display. Mode automatically changes to ALT HOLD within 50 feet of the target altitude.

8. HDG knob – Change target magnetic heading in increments of 1 degree. *(Use left and middle mouse buttons on the edge of the knob or use the mouse scroll wheel to rotate).*

9. HDG SEL – Turn to and hold the target magnetic heading. *(Left click the middle of the knob).*

10. BANK LIMIT Knob – AP bank angle limiter (Auto, 5, 10, 15, 20, 25, 30 deg). *Note: If BANK LIMIT is set to "Auto," the aircraft will not turn at speeds greater than 0.86 mach.*

11. HDG HOLD – Hold the current heading.

12. VERT SPD wheel – Adjust the vertical speed when in V/S mode in increments of 100 fpm.

13. VS/FPA – Activate V/S mode at the current vertical speed (rounded to the nearest 100 fpm). Mode automatically changes to ALT HOLD when the target altitude is reached.

14. ALT knob – Adjust the target altitude in increments of 100 feet.

15. ALT HOLD – Hold the current altitude (rounded to the nearest 100 feet).

16. LOC – Arms and activates LOC lateral mode to follow VOR radials or localizer approach paths.

17. APP – Arms and activates G/S mode to follow ILS glideslope path. Also arms and activates LOC mode.

18. CMD – Turns the Autopilot on and off. AP cannot be activated below 200 ft agl. *(Press any of the three CMD buttons).*

19. DISENGAGE – Deactivates and disables all autoflight functions (both Autopilot and Autothrottle). When this switch is open, the pattern shown below appears on the panel. Autoflight functions cannot operate until this switch is closed.

Note: All autoflight functions (both AP an A/T) deactivate automatically below 200 feet agl.