

# Optimum Allocation of Ergonomic Limits and Legacy Human Interface for Tool [and Vehicle] Control

Primary O→_M○	Trim	
Primary O→_U↑	Gadget Select	
Primary O→_D↓	↑ Helmet/HUD Imaging (sp) ↓ Helmet/HUD Symbology (sp)	↑ VR/AR Zoom (lp) ↓ VR/AR Align (x-lp)
Primary I↔_M○	Variant unique hat. A10C Data Management.	
Primary I↔_U↑	Variant unique hat. A10C Target Management.	
Primary I↔_D↓	Variant unique buttons. ↑ RADAR/FLIR FOV	A10C Boat Forward/Aft/Center] [A10C China Hat Forward/Aft] F14B sweep. P51D coolant.

Sensors O→_M○	Targeting – Threat, Subsystems, Ahead	
Sensors O→_U↑	Un-Cage or Toggle Cage	
Sensors O→_D↓	Turret, Attacker, Ahead	
Sensors I↔_M○	Designator/SensorOfInterest	
Sensors I↔_U↑	Variant unique buttons. F5E RADAR Resume. A10C China Hat.	
Sensors I↔_D↓	Variant unique buttons. Intelligence. Accessories. Detailed updated reference. Satellite view. Target view, zoom in/out. Stellar analysis.	

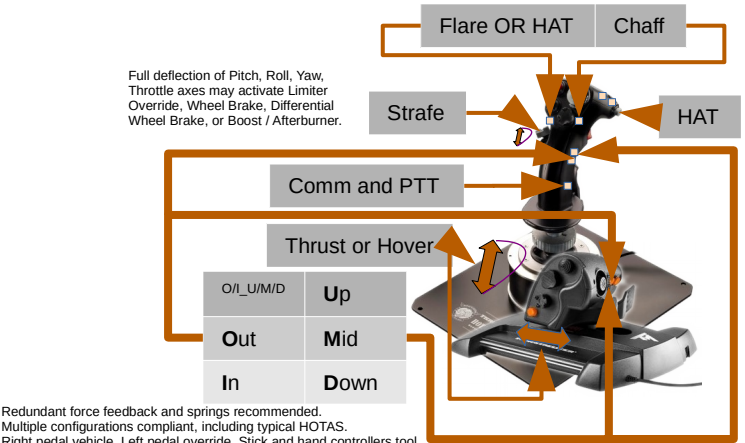
Ship O→_M○	Quick Power	
Ship O→_U↑	Standby Readiness OR Variant Unique Hat. A10C Master Mode. F18C AA, A/G Mode.	
Ship O→_D↓	Lockouts, Accessories	
Ship I↔_M○	Gear	
Ship I↔_U↑	Panels	
Ship I↔_D↓	Reference, Quick Nav	

Comm O→_M○	Radio 3. Default PTT.	
Comm O→_U↑	Radio 1. Special/Magic/Default PTT.	
Comm O→_D↓	Radio 2. Ground/Intercom PTT.	
Comm I↔_M○	Target (friendly) wing. Pull target's target. Target comm transmitter to rescue (long press – unusual).	
Comm I↔_U↑	Scripted orders. Individual/wing specific.	
Comm I↔_D↓	Scripted orders. Menu/keys. Support/Tanker/Repair request.	

Automation O→_M○	Thrust Reversal. Variant Unique BAD MISUSE – stabilization if toggle.	
Automation O→_U↑	Limiter Override	
Automation O→_D↓	Variant Unique button. FA18C Throttle Lift	
Automation I↔_M○	Flight Assist. Automatic Thrust.	
Automation I↔_U↑	Autopilot. A10C Autopilot Toggle. FA18C Attitude and Altitude Hold.	
Automation I↔_D↓	Variant unique button. F5E Pitch Damper Cutoff. F22 Thrust Vectoring Disable.	

Item O→_M○	Hostile+/-, Radar Elevation Control Up/Down.	
Item O→_U↑	Emitter +/- (radar operate/standby).	
Item O→_D↓	Radar Elevation Control Up/Down (RESERVED). Scan Zone Left/Right (F15-FC3).	
Item I↔_M○	Any +/-.	
Item I↔_U↑	Escort +/-.	
Item I↔_D↓	Cargo +/-.	

MiniStick O→_M○	Tool (eg. Throttle Designator Controller) or Strafe.	



PTT O→_M○ (Press if Hat)	Standby PTT	
PTT O→_U↑ (Press if Hat)	Whisper PTT	RESERVED (sp)
PTT O→_D↓ (Press if Hat)	Team PTT	
PTT I↔_M○ (Press if Hat)	Shell/Sim Command/Assistant PTT	
PTT I↔_U↑ (Press if Hat)	RESERVED	
PTT I↔_D↓ (Press if Hat)	RESERVED	

Short Press (sp), Long Press (lp), Extra Long Press (x-lp)  
Reserved – Do not demand modifiers-off (O\_M) layer. Includes unspecified buttons/axes.  
Shell – Separate. Not vehicle/tool control. Visualization, navigation, communication, admin.