## *Front Stick*

TRIM SWITCH BUTTON
CASTLE SWITCH
WEAPON RELEASE BUTTON
TRIGGER
AUTO ACQUISITION SWITCH / AIR REFUELING RELEASE
AUTO PILOT / STEERING DISENGAGE
NOSE GEAR STEERING / WEAPONS BUTTON

## *Front Stick*

| Switch | Direction | Action |
|---|---|---|
| Trigger | 1st Detent | VTR |
| | 2nd Detent | Fire Gun |
| Weapon Release | PRESS | Weapon Release [1] |
| Trim | Fore/Aft/ Left/Rright | Flight Control Trim |
| | PRESS | CMD MAN 1 |

[0] Non-functional features in EA marked with ~~Strikethrough~~
[1] If A/G with TPOD HUD BS and no target, designates on HUD LoS
[2] Short Press AFTER Castle PRESS Short
[3] Taking command a second time in A/G mode sets TPOD HUD BS
[4] With Coolie Down simultaneously
[5] With Master Caution Held Simultaneously
[6] Pattern Steering Line Enable/Disable when cursor function target

| NWS Button | **Direction** | **Weight on Wheels** | **AIM-9** |
|---|---|---|---|
| | PRESS | HOLD: NWS Hi | Cage/ Uncage |

| AP/ Steering Disengage (Paddle) | **Direction** | **Weight on Wheels** | **Autopilot** | **Manual TF** | **Auto TF** |
|---|---|---|---|---|---|
| | PRESS | Stop AFCS Bit | AP Disengage | Reset Flyup | AP Disengage |
| | HOLD | NWS Disengage | | AP Disengage | Revert to Manual TF |

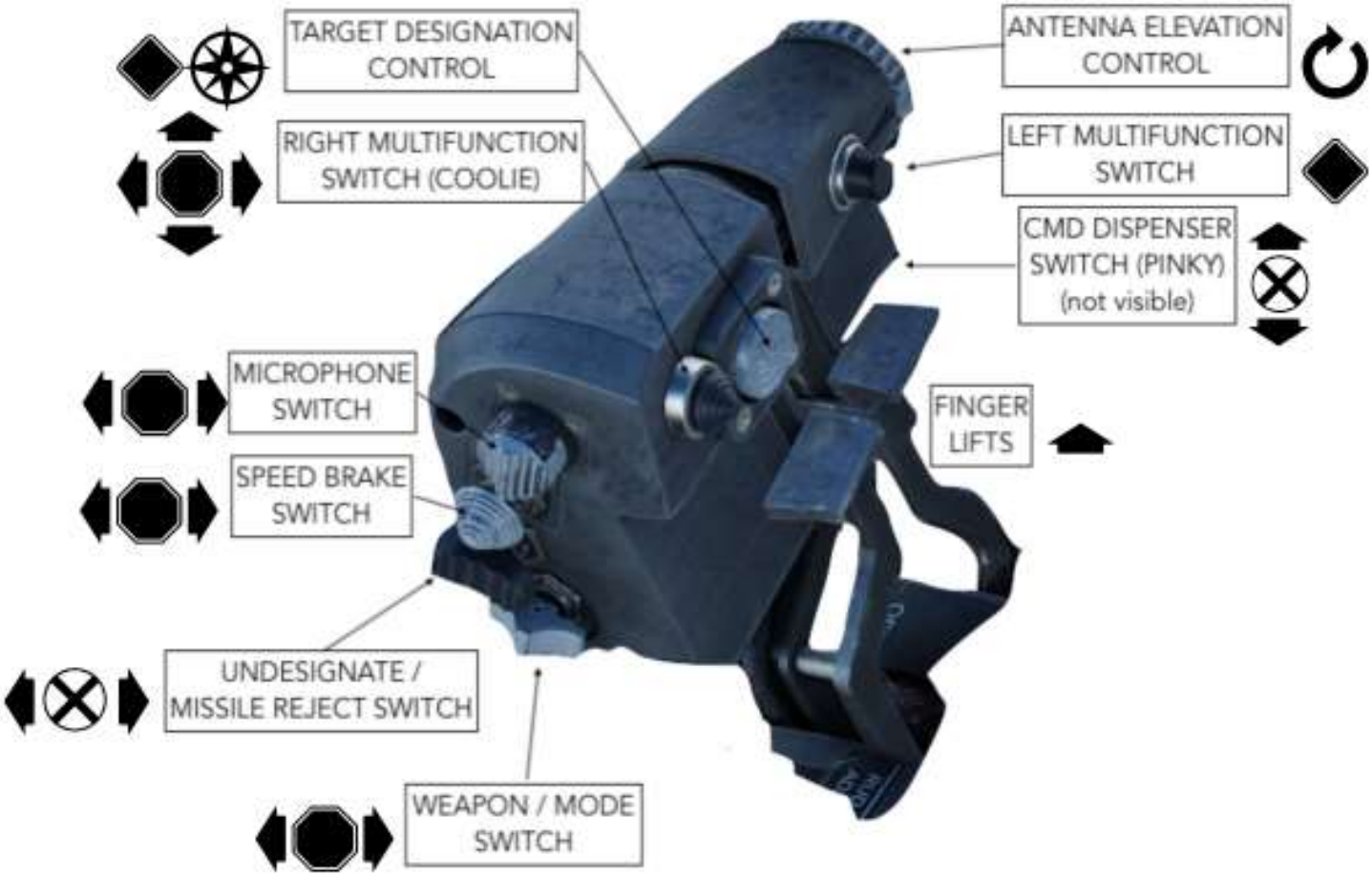
| Castle | **Direction** | **Short** | **Long** | **Take Command Enable [2]** | **~~Look Into Turn Enable [4]~~** | **~~Caution Control Enable [5]~~** |
|---|---|---|---|---|---|---|
| | FWD | A/A or A/G Master Mode | | Take Command HUD [3] | ~~Look Down~~ | |
| | AFT | Scroll MPCD | Take Command MPCD | ~~Take Command MPCD~~ | ~~Look Up~~ | ~~MPCD~~ |
| | LEFT | Scroll L MPD | Take Command L MPD | ~~Take Command L MPD~~ | ~~Look L~~ | ~~L MPD~~ |
| | RIGHT | Scroll R MPD | Take Command R MPD | ~~Take Command R MPD~~ | ~~Look R~~ | ~~R MPD~~ |
| | PRESS | *Take Command Enable* | | | | |

| Auto Acquisition Switch/ Air Refueling Release | **Direction** | **HUD** | **TSD** | **A/A Radar** | **RBM** | **HRM** | **TPOD** | **AAR** |
|---|---|---|---|---|---|---|---|---|
| | FWD | | ~~Smaller Cue~~ | See A/A Chart 1 [7] | Smaller Window | | SHORT: FoV Toggle **LONG: Snowplow** | |
| | AFT | A/G: Auto/CDIP | ~~Larger Cue~~ | | Larger Window/ PSL Enable/Disable [6] | | SHORT: Return to Cue **LONG: STAB** | |
| | PRESS | | ~~Return to PP Map~~ | | Mode Reject | | Track/Untrack | AAR Probe Disengage |

[7] A/A Chart 1

| Switch | Direction | Search | STT | 2TWSH | 4TWSH | 3HDT | 2HDT | Narrow | AIM-7 |
|---|---|---|---|---|---|---|---|---|---|
| Auto Acq | FWD Short | SS or BST | 3HDT | | | 4TWSH | 3HDT | | |
| | FWD Long | LR BST | 2HDT | | | | | | VS BST |
| | AFT Short | VTS | 2TWSH | STT | | | | | |
| | AFT Long | | | | | | | | HPRF Flood |
| | PRESS | Return to Search | | | | | | | |

## *Front Throttle*



## *Front Throttle*

| Switch | Direction | Action |
|---|---|---|
| Mic | FWD | Tx Radio 1/3 |
| | AFT | Tx Radio 2 |
| Speed Brake | FWD | Retract |
| | CENTER | Hold |
| | AFT | Extend |
| Weapon/ Mode Switch (China) | FWD | MRM |
| | CENTER | SRM |
| | AFT | Guns |
| Undesignate/ Missile Reject (Boat) | FWD | Missile Reject |
| | AFT | Undesignate |
| Antenna Elevation Wheel | ROTATE | Elevation Rate Control |
| CMD (Pinky) | UP | CMD MAN 2 |
| | DOWN | CMD MAN 1 |

[4] With Castle Simulataneously
[8] Must be In Command of HUD in A/G, NAV, or INST
[9] A/A Chart 2 below

| Switch | Direction | Action |
|---|---|---|
| TDC | PRESS | SHORT: Miniraster **LONG: Search Sort** |

| Direction | RWS | 3HDT/ 2HDT/ 4TWSH | 2TWSH/ Narrow |
|---|---|---|---|
| Azimuth Bump | Wide/Narrow | 2TWSH | 4TWSH |

| Left Multifunction Switch | Direction | HUD | TSD | SRM | RBM/HRM | TPOD |
|---|---|---|---|---|---|---|
| | PRESS | ~~Cage/Ungage VV [8]~~ | ~~Track/ Untrack~~ | Manual SBR | Freeze/ Unfreeze | Laser Fire/ Stop Firing |

| Coolie | Direction | A/A Radar | A/A Gun | RBM/HRM/ TPOD/TSD |
|---|---|---|---|---|
| | UP | Quick Step | LCOS/GSD | Quick Step |
| | DOWN | Missile BS/ Gun Sight Stiffen/ ~~*Look Into Turn Enable [4]*~~ | | |
| | RIGHT | HOLD: NCTR | | |
| | LEFT | HOLD: IFF Interrogate | | |

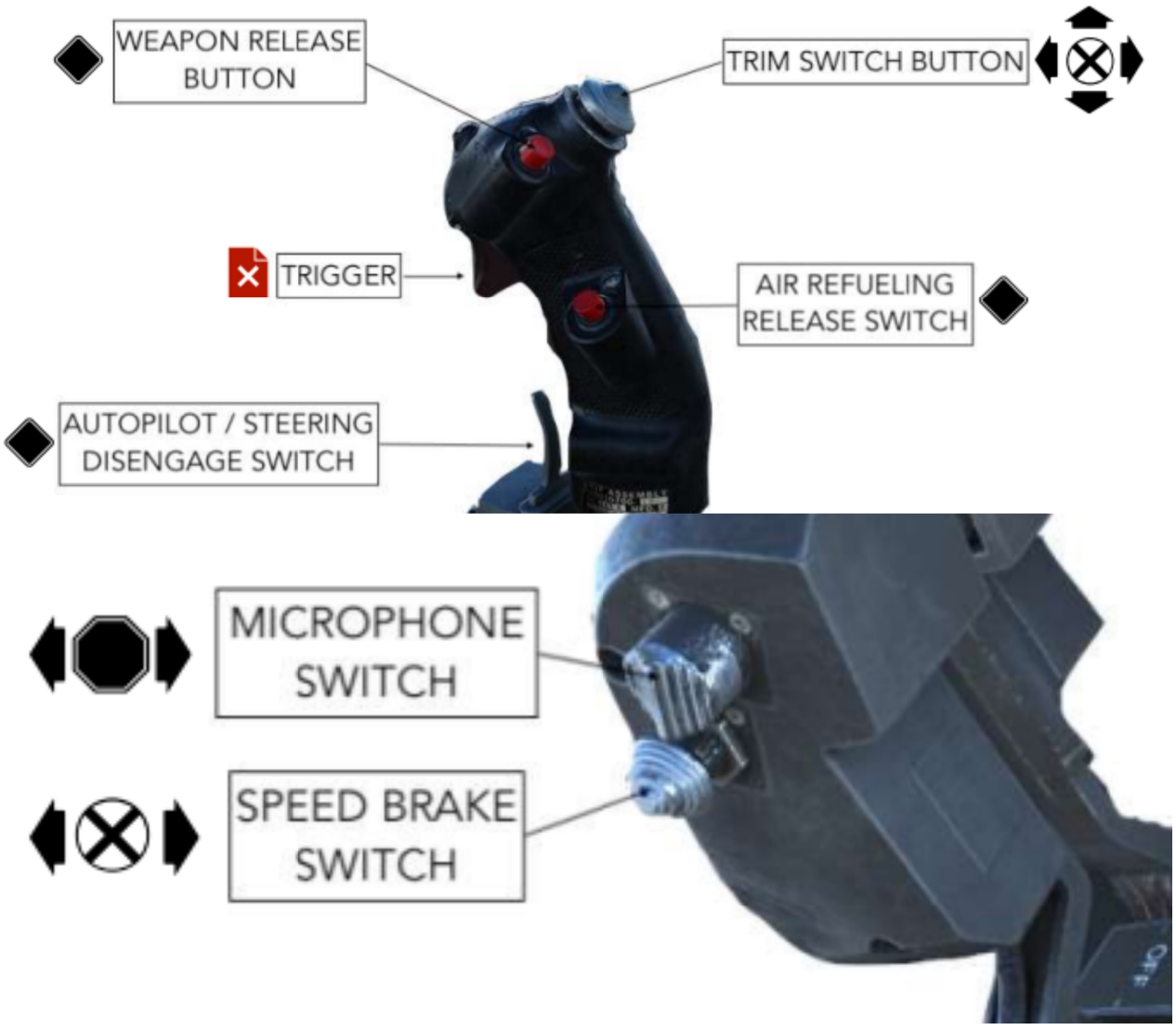
| TDC | Direction | Nav or A/G HUD | TSD | A/A Radar | RBM/HRM/ TPOD | Nav Pod |
|---|---|---|---|---|---|---|
| | Slew | Slew | ~~Slew~~ | See A/A Chart 2 [9] | Slew | |
| | PRESS | Designate | ~~Cue~~ | | Cursor Function | |

## *WSO Stick and Throttle*

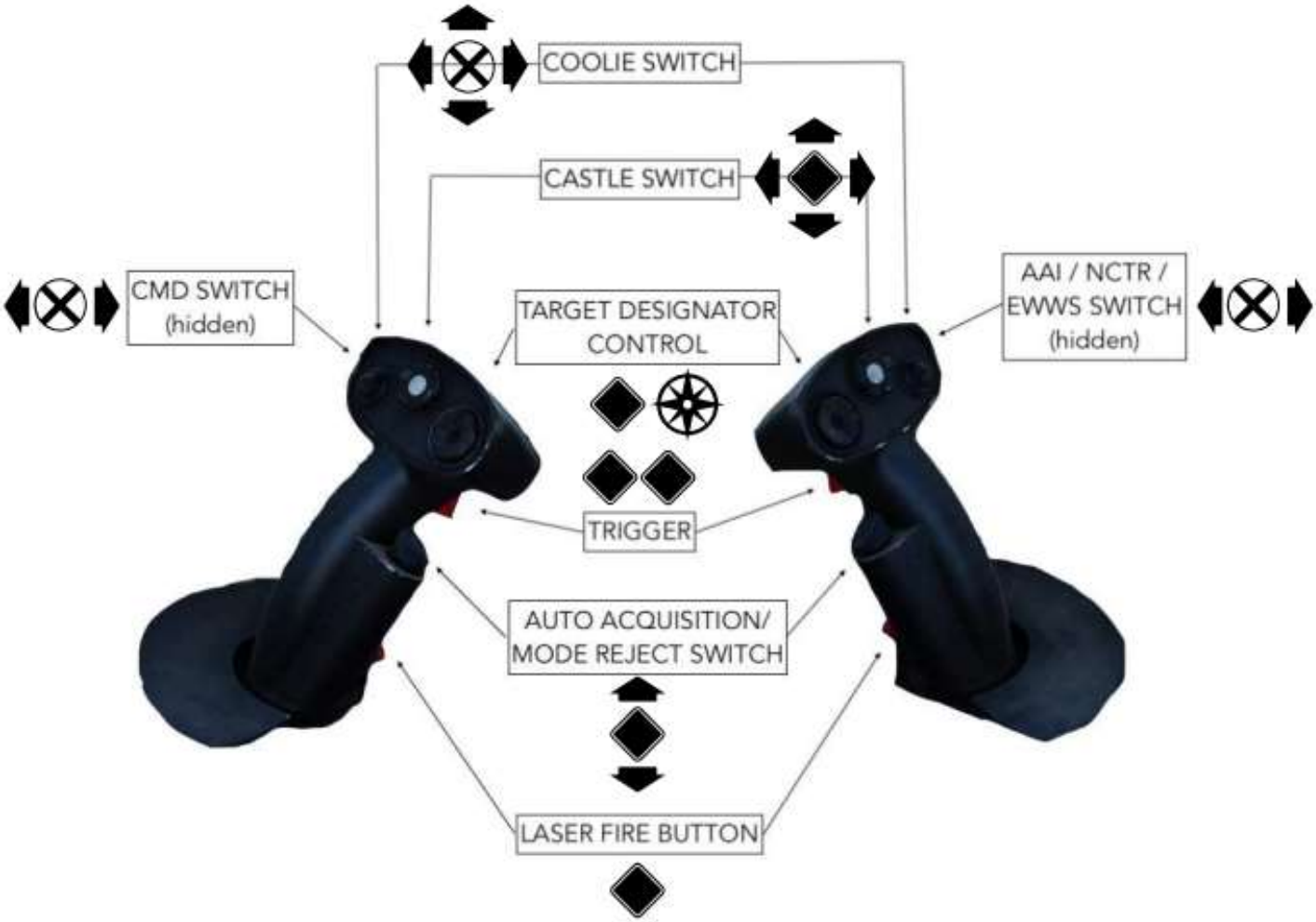
| Switch | Direction | Action |
|---|---|---|
| Trim | F/A/L/R | Flight Control Trim |
| Weapon Release | PRESS | Weapon Release |
| AAR Disengage | PRESS | AAR Disengage |
| AP/Steering Disengage (Paddle) | PRESS | Stop AFCS Bit |
| | HOLD | NWS Disengage |
| Mic | FWD | Tx Radio 1/3 |
| | AFT | Tx Radio 2 |
| Speed Brake | FWD | Retract |
| | CENTER [10] | Speed Brake Follows Front Cockpit Command |
| | AFT | Extend |

| Direction | Weight on Wheels | Autopilot | Manual TF | Auto TF |
|---|---|---|---|---|
| PRESS | Stop AFCS Bit | AP Disengage | Reset Flyup | AP Disengage |
| HOLD | NWS Disengage | | AP Disengage | Manual TF |

[10] The WSO Speed Brake switch is spring centered



## *WSO Hand Controllers*



## *WSO Hand Controllers*

| Switch | Direction | Action |
|---|---|---|
| CMD | FWD | CMD MAN 1 |
| | AFT | CMD MAN 2 |
| AAI | FWD | HOLD: IFF Interrogate |
| | AFT | HOLD: NCTR |
| Coolie | UP | Scroll MPD |
| | DOWN | Scroll MPCD |
| | LEFT | Take Command L/ Move Cautions [5] |
| | RIGHT | Take Command R/ Move Cautions [5] |

[5] With Master Caution Held Simultaneously
[7] See A/A Chart 1 on page 2
[9] See A/A Chart 2 on page 4
[11] With Trigger Half-Action
[12] When Cursor Function Target

| Laser Fire | Direction | AIM-9 | RBM/HRM | TPOD |
|---|---|---|---|---|
| | PRESS | SBR | Freeze/Unfreeze | Laser Fire |

| Castle | Direction | TSD | A/A Radar | RBM | HRM | TPOD |
|---|---|---|---|---|---|---|
| | FWD | ~~Decrease Map Scale~~ | MRM Search | Cursor Map | | SHORT: White/Black/Auto Track **LONG: Black/White Hot** |
| | AFT | ~~Increase Map Scale~~ | SRM Search | Cursor Target | | |
| | LEFT | ~~Toggle Radar/FLIR Cue~~ | Undesignate | Cursor Cue/Mark | | SHORT: Cursor Cue/Mark ~~**LONG: Handoff Initiate STA 2**~~ |
| | RIGHT | | Missile Reject | Cursor Update | | SHORT: Cursor Update ~~**LONG: Handoff Initiate STA 8**~~ |
| | PRESS | ~~Sequence Point Select~~ | Quick Step | Sequence Point Select | | |
| TDC | Slew | ~~Slew~~ | Slew [9]/ Elevation Control [11] | Slew/ Elevation Control [11] | Slew | |
| | PRESS | | | | Expand [11] | Toggle ATRK/PTRK |
| Auto Acq [12] | FWD | ~~Smaller Cue~~ | See A/A Chart 1 [7] | Smaller Window/ PPI Range [11] | | SHORT: FoV Toggle **LONG: Snowplow** |
| | AFT | ~~Larger Cue~~ | | Larger Window/ PPI Range [11]/ PSL Enable [12] | | SHORT: Return to Cue **LONG: STAB** |
| | PRESS | ~~Return to PP Map~~ | | Mode Reject/ PSL Undesignate [12] | | Undesignate |
| Trigger | Half-Action | ~~Track/Untrack~~ | *Elevation Control/ PPI Range Change/ Expand Enable [11]* | | | Track/Untrack |
| | Full-Action | ~~Cue~~ | Designate | Cursor Function | | |

## *Changelog*

| Date | Version | |
|---|---|---|
| 25 Jun 2023 | 0.1 | Initial Version |
| 25 Jun 2023 | 0.2 | Renamed previous version from 1.0 to 0.1<br>Custom A/A Charts (including removing A/A Chart 3)<br>Cleared empty pages<br>Changed button names to conform to given diagrams<br>Removed highlight from empty cells |
| 25 Jun 2023 | 0.3 | Changed more button names to conform to diagrams<br>Added note about WSO A/A TDC depress no action<br>Reorganized A/A Chart 1 |
| 26 Jun 2023 | 1.0 | Initial public release<br>Added note regarding EA status<br>Added note about Take Command Enable on front Castle |
| 26 Jun 2023 | 1.1 | Initial kneeboard release (not pretty but it works) |
| 26 Jun 2023 | 1.2 | Renamed several button actions from DOWN to PRESS |
| 26 Jun 2023 | 2.0 | Added Portrait orientation. Kneeboards are now Portrait<br>Removed redundant AIM-7 Auto Acq binds<br>Simplified A/A Chart 2 and RBM/HRM/TPOD TDC |
| 4 July 2023 | 2.1 | Added Strikethrough to non-functional items<br>Simplified WSO Trigger Half-Action and Cursor Function Target Notes<br>Another DOWN command renamed to PRESS<br>Clarified PSL Enable/Disable<br>Added notes about A/G HUD Designation<br>Reorganized Changelog and Notes |
| 8 Dec 2023 | 2.2 | Discontinued Landscape Version due to redundancy<br>Updated WSO Castle Binds<br>Updated TGP Auto Acq Binds<br>Updated EA Non-Functional Features |
| 3 Jan 2024 | 2.3 | Added WSO TDC Depress ATRK/PTRK Toggle (Thanks Stryker990!) |