

General Usage Tips:

- Make it part of your preflight to be sure that reset the stick to Nav Master Mode (by holding **H2L**). Remember that the "mode" that the stick is in has nothing to do with which mode your Viper's FCC is actually in in-game. It's always best to start your mission by making sure that the sim and the stick match.
- Do the same preflight to the toggle for EWS Mode (**H4L**), so that you don't get a surprise the first time you hit it after you're airborne.
- If you ever need to jump straight from DF to MRM mode or vice versa, you can do this by holding **FOV (S3 In)** while moving the Dogfight switch. This is useful as it avoids canceling your current override mode – meaning that you won't lose a locked target if, for example, you had previously been using A/G master mode.
- If a button has a "held" function assigned to it, then you must press AND, before 200 milliseconds have passed, release the button to use the "normal" function. If you've never used a profile set up like this before, I suggest playing around in Foxy's key tester some to get a feel for how fast you have to release buttons for the normal function, as well as how long they need to be held to activate the held function.

ICP Keyboard Setup:

The included keyfile moves the most commonly used ICP commands to the keyboard numberpad. I've found that ICP usage is my most common interaction with the 2D cockpit, and not having to use the mouse for this speeds up things dramatically.

ICP List	= Numpad *
ICP keys 1-0	= the corresponding keys on the numberpad (1=1, 2=2 and so on, not corresponding to position)
ICP Enter	= Numpad Enter
ICP RCL	= Numpad .
ICP Next	= Numpad -
ICP Previous	= Numpad +
ICP 4-way switch	= The 4 arrow keys to the left of the Numpad

Stick Layout:

The included graphical layout provides a basic overview of the various functions. You'll probably want a better idea of what the stick is doing before you attempt to fly, and you're in the right place to learn.

Trigger

AG Mode

1st Detent = Manual Lase

AA Mode

1st Detent = Activate ACMI if set to AUTO

All Modes

2nd Detent = Fire gun

FOV (S3) In

2nd Detent = Reset Trim

Pickle Button

Weapon Release

Note: When in MRM override mode, the Pickle must be held for 1 second before a missile will fire. This simulates the real-life firing delay as data is transferred to the missile.

FOV (S3) In

Emergency Jettison (must be held for roughly 1 second)

MSL Step

Weight on Wheels

Activate Nose Wheel Steering (NWS)

AA Mode

Selects next available missile of the currently selected type

AG Mode

Cycles between CCIP, CCRP and DTOS

FOV (S3) In

Toggle Cat I/III

Held

Toggle SA Bar

FOV

Cycle FOV options for the current Sensor Of Interest (SOI):

TWS	Norm/EXP
GM	Norm/EXP/DBS1/DBS2
GMT & SEA	Norm/EXP
AGM-65	Wide/Narrow
TGP	Wide/Narrow/Exp

Held

Activate shift functions on most other buttons and switches

AP Disc

Disconnect autopilot (allow manual flight control) while held

Wheel Brakes

Note: These two functions are held at the same time, but won't interfere with each other as you aren't going to be using the autopilot while on the ground.

FOV (S3) In Eject

POV

All Directions = POV hat (view)

FOV (S3) In

Up = Trim Nose Down
Down = Trim Nose Up
Left = Trim Roll Left
Right = Trim Roll Right

Note: The trim functions are automatically repeating. While the trim command is active, you will get one "click" of trim every 0.1 second.

TMS (Target Management Switch)

The TMS itself is a mode-Dependent with quite a few functions. Additionally I've added several other non-realistic mode dependent functions. Because of this, you should always be sure that you change master modes via the stick.

AA Mode

RWS:

Up = SAM < STT
Down = STT > SAM > Search
Left = Cycle AA Radar modes
Right = Command TWS

TWS:

Up = Designate Target < STT
Down = STT > Search > Command RWS
Left = Cycle AA Radar Modes
Right = Step Bug

ACM:

Up = Boresight Scan (rejects current target)
Down = 10x60 Scan (rejects current target)
Left = Slewable Scan (rejects current target) ***Only works when ACM is selected via DF Override***
Right = 30x20 Scan (rejects current target)

AG Mode

Up = Designate Target
Down = Reject Target
Left = Cycle AG Radar Modes
Right = Cycle Snowplow/Steerpoint

FOV (S3) In

Up = Next Steerpoint
Down = Previous Steerpoint
Left = First press selects AA Master Mode
= Until another Master Mode is selected, will cycle AA weapons
Right = First press selects AG Master Mode
= Until another Master Mode is selected, will cycle AG weapons

Held

Left = Return to Nav Master Mode ***Will only function if AA or AG mode has already been selected***

Double Tap

Up = Radar on/off ***Must be pressed rapidly***

DMS (Display Management Switch)

Up = Select HUD as SOI
Down = Toggle SOI between left & right MFD
Left = Cycles Left MFD formats
Right = Cycles Right MFD formats

FOV (S3) In

Up = 2D Cockpit
Down = 3D Cockpit
Left = Padlock Previous Target
Right = Padlock Next Target

Note: The padlock function is mode dependent. In AA and Nav modes, AA targets will be padlocked. In AG mode, AG targets are padlocked.

Held

Up = Glance forward ***Only works while in 3D/Padlock view***
Down = Check six ***Automatically returns view to 2D cockpit after release***

CMS (CounterMeasures Switch)

The actual functions of the CMS on USAF F-16C's are classified.

Up (forward) = Run selected EWS Program
Down (back) = Toggle Jammer On/Off
Left = Toggle EWS Mode Manual/Semi/Auto
Right = Toggle Master Arm

FOV (S3) In

Up (forward) = Select EWS Program 1
Down (Back) = Select EWS Program 2
Left = Select EWS Program 3
Right = Select EWS Program 4

Held

Right = Laser Arm

You should use the in game controller setup to assign the ANT, RNG and microstick axes to their respective functions as described below, or if you happen to be using a version of AF older than 1.03, you can set them up with normal axis statements. See the included setup.pdf for instruction on how to do both.

Radar Cursor/Enable

Microstick:

Controls cursor in the current SOI

Note: In AA radar modes moving the cursor off of the left or right side of the MFD page will toggle 30 or 60 degree scan. In both AA and AG modes, moving them off of the top of the screen will increase range while moving them off of the bottom decreases it.

Enable:

AA Modes

Switches AIM-9 and AIM-120 from SLAVE to BORE while held

AG Modes

Toggles AGM-65 submodes PRE/VIS/BORE

FOV (S3) In

Microstick gives mouse control

Enable acts as left mouse button

Antenna

Controls radar antenna elevation

Range/Uncage

Range:

AA Mode

No Function

AG Mode

Adjusts Radar gain

Uncage:

AA Mode

Toggles AIM-9 seeker between cage and uncage

AG Mode

Removes AGM-65 seeker cover

FOV (S3) In

Open/Close refueling door

Held (with S3)

Raise/Extend landing gear (must be held for \approx 1 second)

DogFight Switch

Left (Back) = Toggles Dogfight Override mode

Right (Forward) = Toggles MRM Override mode

Center Position cancels selected override mode

Speed Brake Switch

Left (Back) = Opens speedbrakes until released or fully open

Right (Forward) = Closes speedbrakes until released or fully closed

Center position stops the speedbrakes at their current setting

FOV (S3) In

Right (Forward) = NVG

Comms Switch - Standard Setup

Down (Forward) = Center Track IR

Left = RWR – Search

Right = Look closer

FOV (S3) In

Down (Forward) = Pause Track IR

Left = Toggle sensitivity of rotaries (for more precise antenna or gain control)

Right = Create mark point

Held

Up (Back) = Press-to-Talk for voice comms and/or voice recognition

Left = RWR – Low

Comms Switch – Alternate Setup

Down (Forward) = AWACS – Declare

Left = Element – Attack My Target

Right = Wingman – Attack My Target

FOV (S3) In

Down (Forward) = AWACS – Vector to Threat

Left = Element – Weapons Free

Right = Wingman – Weapons Free

Held

Up (Back) = Press-to-Talk for Voice comms

Down (Forward) = AWACS – Request Picture