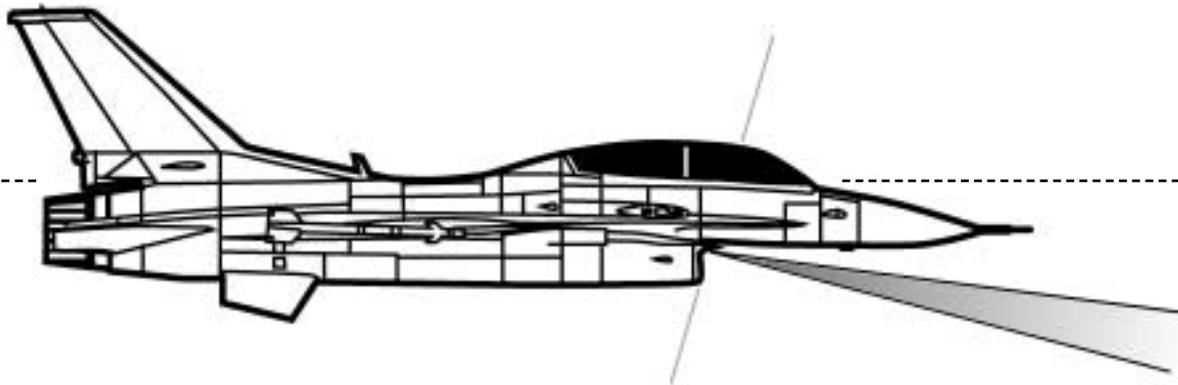


LANTIRN TUTORIAL

For use with F-16 Multirole Fighter by NovaLogic

One of the more complex elements of the F-16 is the Low Altitude Navigation and Targeting InfraRed for Night system. The LANTIRN system actually consists of the [AN/AAQ-13 Navigation pod](#) and the [AN/AAQ-14 Targeting pod](#) that attach under the forward fuselage of the F-16.

When the F-16 takes off, the LANTIRN is directed 30 degrees down from the horizontal attitude. It can be made to slew in a 180-degree arc from this point, allowing it to follow terrain and track ground targets.



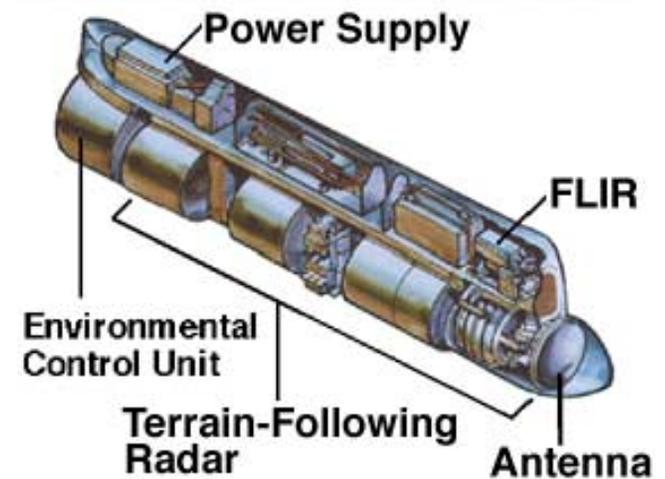
For additional information on the LANTIRN system, please visit the Official Lockheed Martin website at www.lmco.com/LANTIRN/info.html

Using LANTIRN Navigational Pod

The navigation pod's terrain-following radar (TFR) and forward-looking infrared (FLIR) sensor enable pilots to fly during daylight or at night, under the weather, and at very low altitude. The TFR lets pilots maintain a selected altitude over terrain with varying elevation.

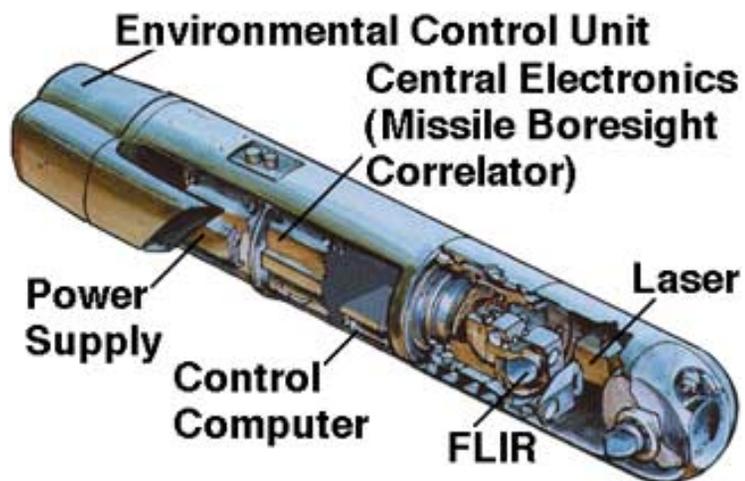
Press the F9 key to activate the LANTIRN on the HUD. The holographic HUD will illuminate with a greenish overlay.

The LANTIRN Navigational pod has a 21° x 28° field of view.



Navigation Pod AN/AAG-13	
Weight	430 lb (195 kg)
Height	21.5 in (54.6 cm)
Width	14.0 in (35.5 cm)
Length	78.2 in (198.5 cm)

Using LANTIRN Targeting Pod



Targeting Pod AN/AAQ-14

Weight	540 lb (245 kg)
Width	15.0 in (38.1 cm)
Length	98.5 in (250 cm)

LANTIRN's targeting pod is integrated with the aircraft's fire control and internal navigation systems, providing multiple methods to acquire and destroy targets.

You can target the LANTIRN with the LANT mode Multifunction Display or using the EO mode on the HUD. Pressing the CONTROL and HOME key at the same time toggle the field of view between 6° x 6° wide angle and 1.7° x 1.7° narrow angle zoom. Slew the LANTIRN's targeting head using the Joystick Hatswitch while holding down on the SHIFT Key.

Alternatively you can use the U key to toggle Slew Mode on and off. When the "S" appears in the bottom of the screen, use the Keypad /, *, -, + to slew the Targeting Pod left, right, up, and down respectively. Since the targeting crosshairs begin looking straight down, you may have to slew it up if you want it to appear on your HUD. The LANTIRN has a 180° slew, which means it can only rise to a little more than half way up your HUD. For quick reorientation, press the HOME key to bring the LANTIRN Targeting system to center position (30° down from the F-16's attitude).

Using LANTIRN with GBU Laser Guided Bombs

GBUs are Laser Guided Bombs, this means the LANTIRN must “lase” or laser target a ground object for the bomb to be able to find it. Since the bombs guidance system relies solely on the LANTIRN pod, you will not be able to acquire another target with the LANTIRN until the bomb has impacted on its target.

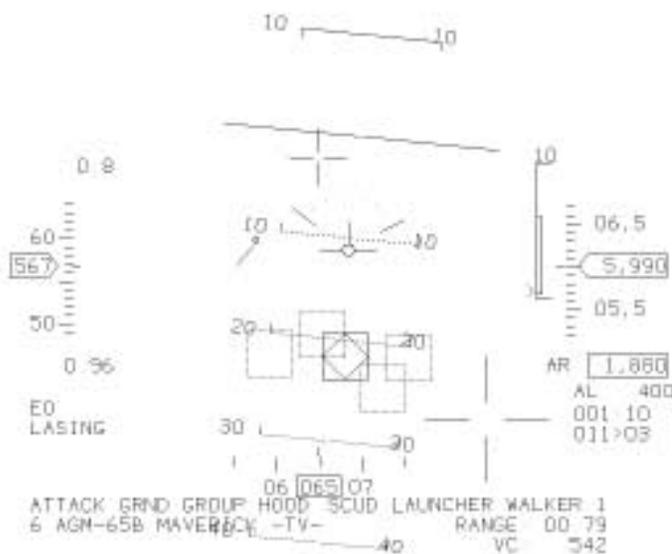
Use the SCROLL LOCK key to activate the Laser Designator. A small “L” will appear in the lower right corner of the screen when it is turned on.



Next you must manually slew the targeting head and keep the crosshairs over the ground object you wish to bomb. You cannot lase more than 180°.

Note that you do not have to use the LANTIRN to drop bombs. The Continuously Computed Impact Point will release the unguided bombs with reasonable accuracy.

Using LANTIRN with AGM-65 Maverick missiles



If you have acquired a ground target using radar, you may have the LANTIRN targeting system lock onto that object. After establishing the radar targeting box, press the CONTROL and END Key simultaneously. The LANTIRN will now attempt to maintain that lock independent of where you fly.

If you want to target an object that is not one of your preprogrammed mission targets, you can manually slew the LANTIRN

around and input a manual lock. Use the LANT MFD or EO HUD and slew the targeting head over your ground target. Once you are satisfied with the placement of your LANTIRN's crosshairs, press the END key to manually lock the targeting system. The LANTIRN will try to maintain this lock as you continue to fly.

Once a LANTIRN lock is established, the targeting system is no longer bound by the 180° field of view.