٠

٠

Step 1: "Preflight"

- CHECK: Inspect NVGs
 - No loose parts or frayed wiring
 - Working knobs & levers
 - o Fresh batteries
 - Serviceable lanyard
 - CLEAN: Clean Lenses
 - Use lint-free lens paper to avoid scratches
- ASSEMBLE: Mount NVGs to cranial
 - No excessive force
 - Mount and connect battery pack
 - o Attach lanyard.
 - WEAR: Put on cranial
 - Start with NVGs flipped up
 - Put on safety glasses, then cranial
 - Flip NVGs down
 - Move power switch to the right (on) position

CHECK - CLEAN - ASSEMBLE - WEAR





Step 2: "Alignment"

- TILT: Center tilt lever to neutral
 - Set the tilt adjustment to the centered position.
- IPD: Set Interpupilary distance
 - When properly adjusted, the two images of the tubes overlap to form a single image (circle). Each individual image is directly in front of the corresponding eye.
 - Improper adjustment of the IPD can cause loss of visual acuity, loss of depth perception, and/or severe headache and fatigue.
- UP/DOWN: Adjust vertical
 - Adjust the vertical position of the binocular assembly using the vertical adjustment knob. The binocular assembly should be directly in front of the eyes.
- N/OUT: Adjust fore and aft
 - The goggles should be as far away from the eyes as possible while still maintaining a sharp 360deg edge around the NVG image. This will allow good viewing under the goggle without detracting from its field of view.
- CHECK: Evaluate Picture
 - The NVG should be correctly aligned. There should be no shading in any part of the field of view. If there is, recheck the above adjustments. While performing the alignment procedures, it may be helpful to evaluate each tube individually as well as together.

TILT - UP/DOWN - IPD - IN/OUT - CHECK

Step 3: "Focus"

- (Only focus one tube at a time: Settings may vary for each tube)
- OUTER: Objective focus outer ring
 - Focus the outer ring until you can resolve as many of the patterns as possible in the ANV-20/20 box or on a focusing chart.
 - If your ship does not have an ANV-20/20 box or focusing chart, focus on the aft edge of the flight deck.
 - Straight edges should be distinct and pinpoint lights should look like dots with little or no halo.
- INNER: Diopter focus inner ring
 - Fine tune the picture by rotating the inner ring <u>counter-clockwise</u> until the picture is slightly blurred. Stop here and pause a second, letting your eye relax. Now, slowly rotate the ring back <u>clockwise</u> until the picture just becomes sharp. DO NOT rotate the knob beyond the setting which just sharpens the picture. If the inner ring is turned too far, the eye muscles will initially accommodate for the over-correction, but over time, the eye muscles will become fatigued, resulting in a loss of visual acuity, depth perception, and/or severe headache. Do not readjust the diopter after completing this step.
- OUTER: Fine-tune objective focus outer ring
 - Take a moment and see if minor adjustments can be made to the objective focus that allow you to resolve any more detail.
- SWITCH: Focus of opposite monocular
 - Repeat focus steps for the second tube, then evaluate overall picture. Make minor corrections if needed.

OUTER - INNER - OUTER - SWITCH

Beta Test

NVG Alignment and Focus Guide for LSOs

Step 1: "Preflight"	Step 2: "Alignment"
 CHECK: Inspect NVGS Working knobs & levers, Fresh batteries, No loose parts or frayed wiring, Serviceable lanyard. CLEAN: Clean Lenses Use lint-free lens paper to avoid scratches ASSEMBLE: Mount NVGs to cranial No excessive force, Mount and connect battery pack, Attach lanyard. WEAR: Put on cranial Start with NVGs flipped up, Put on safety glasses, then cranial, Flip NVGs down, Move power switch to the right (on) position. Fore and Aft Diopter Focus Right IPD Adjustment Objective Focus Ring Left IPD Adjustment 	 TILT: Center tilt lever to neutral Set the tilt adjustment to the centered position. UP/DOWN: Adjust vertical The binocular assembly should be directly in front of the eyes. IPD: Set Interpupilary distance Both images overlap to form a single image (circle) Improper IPD can cause loss of visual acuity, depth perception, and/or severe headache and fatigue. IN/OUT: Adjust Fore and Aft Set as far away from the eyes as possible to allow good viewing under the goggle, about ³/₄ to 1 inch. CHECK: Evaluate Picture There should be no shading in any part of the field of view. If there is, readjust. It may be helpful to evaluate each tube individually as well as together.
	 Step 3: "Focus" OUTER: Objective focus (outer) ring Focus the outer ring until you can resolve the 20/30 pattern (or better) in the ANV-20/20 box or on a focusing chart. If your ship does not have focus gear, stand at the hangar and focus on the affect edge of the flight deck. Straight edges should be distinct and pinpoint lights should have little or no halo. INNER: Diopter focus (inner) ring Fine tune the picture by rotating the inner ring <u>counter-clockwise</u> until the picture is slightly blurred. Let your eye relax, then slowly rotate the ring back <u>clockwise</u> until the picture. If the inner ring is turned too far, the eye muscles will accommodate for the over-correction, but will eventually become fatigued. Do no readjust the diopter after completing this step.
	 OUTER: Fine-tune objective focus (outer) ring Make minor adjustments to the objective focus if needed. SWITCH: Focus of opposite monocular Repeat focus steps for the second tube, then evaluate overall picture. Make minor corrections if needed. (Only focus one tube at a time: Settings may vary for each tube).