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NVG Cockpit

The following guidance is provided by Night Flight Concepts, Inc. The intent of the bulletin is to educate and make aware to the users elements to consider when selecting an NVG cockpit lighting modification solution. More information is available on this subject via email to info@nvgsafety.com.

NVG Cockpit Lighting

NVG compatible lighting is both an objective and subjective matter. On one hand, you have the regulatory authority that establishes a minimum standard with little regard to the preferences of the users. They establish minimum criteria based often on scientific data regarding levels of light, chromaticity issues, and other difficult to spell issues that are definitely in the need-to-know category.

On the other hand, users of NVGs are not always impressed with the end result of the FAA approved lighting modification. Depending upon the NVG lighting manufacturer, there will be significant differences from type of modification to another. You may have a cockpit that has a panel overlay and requires additional switchology for NVG mode. A different manufacturer may only filter the external face of some instruments and internally change bulbs of other instruments.

No matter which path you choose, it is imperative that you do your due diligence when contracting for an NVG cockpit lighting modification. Don't make your decision on a cockpit that is newly modified. Go find an aircraft that was modified two or three years prior. See how the modification holds up to the wear and tear of the NVG users. Just because you have a pretty installation on day one in no way means that it will be that way in a year or two.

NVG lighting products differ greatly. One thing remains constant but is often overlooked by the majority of NVG users is the continued airworthiness of an NVG cockpit modification. After delivery of the aircraft and utilization of the NVGs, the aircraft will continue to be maintained by A&P mechanics that may or may not be familiar of the particulars of an NVG modified cockpit. A simple radio swap without verifying continued airworthiness of the STC would render the aircraft non-airworthy for NVG use. In most cases, the aircraft is released and the NVG users have no idea of the aircrafts non-airworthy condition, only that the lighting in the aircraft is now creating a glare and reducing the pilot's visual acuity.

This condition will most likely lead to a phone call to the NVG lighting manufacturer as a modification problem. In fact, the case that I am describing is common and there is nothing wrong with the lighting kit. The problem is a poorly trained NVG technician not familiar with NVG cockpit continued airworthiness. If you are planning to modify your aircraft for NVG use, plan to send your maintenance technician to a comprehensive NVG cockpit continued airworthiness training program.

In addition to training your maintenance staff, pilots and other users of NVGs in the aircraft should be trained on NVG cockpit continued airworthiness as well.



If your organization is considering adding NVGs into your program, take the time to contact a reputable NVG cockpit lighting manufacturer. If you have question on the topics discussed on this bulletin, please use the contact information below.

Learn More

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