

EFVS QUARTERLY

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The demonstration phase has always been a critical component of FAA authorization process. EFVS authorizations are no different. In this edition of the EFVS Newsletter, we try to explain what a demonstration may look like if you are a part 91 operator applying for LOA CO48.

LOA CO48 DEMONSTRATION

The demonstration phase of the application process gives the inspector an opportunity to observe an operator before signing and issuing the authorization. This is important because an inspector is responsible for safety oversight, and the demonstration provides your inspector with the confidence they need to sign your authorization.

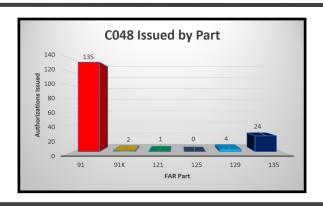
An inspector has the discretion to request the operator demonstrate many different facets of conducting safe EFVS operations such as aircraft operations, technical knowledge, or administrative procedures. Experience has shown that it is impractical to accompany a crew on a flight to observe an EFVS operation or to observe an EFVS operation conducted during simulator training. This doesn't mean that your inspector cannot ask for an in-flight demonstration. The most practical form of demonstration is a tabletop discussion accompanied by voluntary EFVS operations reporting which will allow the inspector to get a better understanding or your operation.

Through experience, the following items have been added to the Part 91 LOA CO48 Application Guide as potential discussion items that an inspector may cover in this phase.

- Can you describe any supplemental EFVS procedures developed outside the approved training in the application?
 Demonstration of these items may be required.
- Can you describe your procedures for tracking EFVS recent flight experience?
- Can you identify and explain any EFVS operational limitations included in the EFVS section(s) of the AFM(S)?
- Can you describe how you comply with the EFVS manufacturer's ICAs?
- Have you signed up to participate in the voluntary FAA pilot feedback program? Participation in the program may assist in completing the evaluation.

The most important thing to remember is that your inspector is responsible for safety oversight of ou operation and for issuing the LOA. Therefor the have the discretion to request a demonstration they deem appropriate to the circumstance.





EFVS PERFORMANCE

When using an EFVS, it is important for pilots to understand what factors affect the performance of their system. There are several things that can adversely affect EFVS performance but the two that seem to always show up in conversation are weather and the presence of LED lights.

The makeup of the obscuration when flying an approach can make EFVS ineffective. To steal a term from the engineers, the size of the particulate matter and its makeup can determine how well the system can "see." Heavy rain and dense fog are much more difficult for a system to produce an image than in light snow or blowing sand. A pilot should look very closely at what is causing the low visibility conditions when conducting an EFVS operation since some obscuration types are much more likely to result in a successful approach than others.

Much like the weather, the type of lighting can significantly affect the performance of the EFVS. Incandescent lights produce a great amount of heat and the current infrared (IR) EFVS sensors can sense the lights fairly easily. Lights with LED bulbs do not emit much heat and the majority of IR based sen-

sors will not be able to produce an image of the lights. Again, the pilot should gain as much knowledge about the airport and its lighting as possible when determining whether to conduct an EFVS operation.



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