Docket Management System
U.S. Department of Transportation
Room Plaza 401
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Reference: Docket number FAA-2003-14449
"14 CFR Parts 1, 91, 121, et al., Enhanced Flight Vision Systems; Proposed Rule"

Subject: Comments about the Notice of Proposed Rulemaking (NPRM) concerning operations using an Enhanced Flight Vision System (EFVS)

As the Commanding Officer of Fleet Logistics Support Squadron 1 (VR-1), I commend the FAA for recognizing the capability and potential of an Enhanced Flight Vision System (EFVS) by developing regulations for its operational use. As an operator of the Gulfstream Enhanced Vision System (EVS) on a C-37A (Gulfstream V) and the only operator of a commercial derivative aircraft owned by the U.S. Navy with an Enhanced Vision System, I am providing input to the NPRM concerning operations using a EFVS in order to ensure that new regulations will be valid not only for today, but also for the foreseeable technological advances of the future.

Assessing flight visibility, as outlined and required in 14 CFR Part 91.175(c)(2), (d), and proposed (l), is difficult to determine and quantify in a practical manner. While the proposed rule for EFVS-equipped aircraft is consistent with existing legislation, it does not address the real problem. In the current regulation 14 CFR Section 91.175 (c) and (d), no pilot may operate an aircraft, except military aircraft of the United States, at any airport below the authorized MDA or continue an approach below the authorized DH/DA unless the flight visibility is not less than the visibility prescribed in the standard instrument approach being utilized. This regulation requires the pilot to determine and assess a numerical value to the horizontal visibility in order to determine if the approach can be continued. This is not practical or realistic. An objective and calculated numerical assessment of the flight visibility from the cockpit of an aircraft, as required by current and proposed regulations, is not quantifiable. Amore prudent approach would be to delete the flight visibility requirement in its entirety. Conversely, continuation with an approach below MDA, DH, or DA should be predicated on ability to see the runway environment, not a numerical determination of the current flight visibility. This would harmonize the FAA and JAA regulations, which has been a stated goal of both agencies.

The proposed rule also defines EFVS design requirements and limitations for usage based on a specific system. I believe that a performance-based rule, independent of current technology, would provide a lasting, equitable regulation that would enable future technology and the associated performance benefits. Regulations should be instituted which may accrue to technological advances, not restrict them: this should be a goal of any new regulation. Additionally, it is our opinion that the rule should focus on pertinent operational criteria. Certification criteria would be more appropriate in 14 CFR Part 25.

The proposed rule provides 14 CFR Part 91 operators a potential operational credit when using an EFVS during low visibility approach operations. As EVS operators, my squadron pilots have seen the benefits to situational awareness, runway incursion prevention and terrain avoidance provided by the EVS system. During several night approaches to unfamiliar airfields, the EVS has provided immeasurable situational awareness to the pilot. The picture provided by the EVS has heightened the awareness of the surrounding terrain and runway environment to the point that night approaches with the EVS are a comfortable as day approaches. We believe the overall operational benefits of the Gulfstream EVS is not just for the improved minima during low visibility approach, but in the overall additional safety the system brings to any aircraft with this system installed. Intuitive rationalization would imply that if non-Part 91 aircraft are not provided the opportunity to gain an operating benefit, the purchase of an EFVS couldn't be economically justified. Although the additional safety benefits of an EFVS are abundant, they will not be available to a large portion of the commercial aircraft fleet due to the cost/benefit analysis of it purchase. Providing an operating benefit to all classes of aircraft will stimulate the implementation of the technology and will provide an increased level of safety for the entire aviation fleet in general.

I commend the FAA for developing official regulations for the use of EFVS. Rapid adoption of revised regulations, which take the above points into consideration, would be greatly appreciated.

Yours sincerely,

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