

Requirement ID: 189

Sponsor Organization: ASW

POC: Lorry Faber

Requirement Title: NVG lighting requirement

Funded Requirement:

- FY01: Yes
- FY02: Yes
- FY03: Yes
- FY04: No

Requirement Statement: This research will validate and expand the draft AC material in Part 27 and Part 29 concerning NVG certification for rotorcraft civil operations. This material only suggests one means of compliance which many operators have complained is not cost effective and not the sole means. However, without this research there is uncertainty if another means may be safe to an overall NVG operation. This research is using the aid of the US military since they too have agreed that alternate methods needs to be explored for cost and immediate implementation. Three NVG civil certifications already exist for a FAR Part 27/29 rotorcraft flying under FAR Part 135 operations, with more to follow. The last certification effort had requested an unknown method to both the FAA and DoD. Research is required immediately so the appropriate alternate methods can be justified when requested.

Background: RTCA SC-196 Minimum Operational Performance Standards states a method of compliance for NVG lighting that is very similar to the method employed by the military. Many civilian operators, FAA test pilots and small manufacturers are concerned that this method is expensive and not necessarily the only method out there. However, due to lack of data, the current method is the only one proven to be safely employed as an effective evaluation process. The Committee agreed that this method will be cited in the document with a caveat that this is a recommendation only and that applicants applying for NVG certification has the right to not use this method if another method is appropriately documented and justified. As a result, many FAA and DoD are concerned that the alternate means of compliance that are suggested from applicants may not be totally proven to be safe. Most applicants (or small manufacturers) have limited budgets and therefore do not commit testing funds to R&D as other agencies might do. It is very difficult for the FAA to refute the data if the data is well justified for the small operation.

Output: report stating the results of repeatability testing for military accepted methodology and describing the alternative, inexpensive methodologies that provide the same results

Regulatory Link: