

Title: Night vision goggle Certification Issues

Description of Requirements:

This research will contribute to formulating an AC and Noticed for Proposed Rulemaking (NPRM) for civil operations for general aviation and rotorcraft for NVG certification and operations. Also, a Technical Standard Order is needed for the Night Vision Goggle equipment. There is currently no guidance for NVG's except for military specifications and regulations which may not be adequate for civil use. Two NVG civil certifications already exist for a FAR Part 27/29 rotorcraft flying under FAR Part 135 operations. There are other supplemental type certificate applications concerning NVG usage as well as waivers to the operating rules. Research and potentially flight testing is required immediately so the appropriate regulatory statements are written and adopted.

Background:

Project Entails: Night vision goggle operational problems: Literature review and survey of existing issues. This need stems from recent approval for specific civilian use of NVG and the requirement to complete the RTCA SC-196 Minimum Operational Performance Standards. Examination of use in expected civilian operations as compared with military operational data to determine specific problems that may be associated with device use (CAMI proposed this examination originally in 1995). Also, determine minimum operational criteria for types of NVGs & NVG compatible aircraft lighting to be used, as well as training guidance for this equipment for civilian use. This research will contribute to formulating an AC and Noticed for Proposed Rulemaking (NPRM) for civil operations for general aviation and rotorcraft for NVG certification and operations. Also, a Technical Standard Order is needed for the Night Vision Goggle equipment. There is currently no guidance for NVG's except for military specifications and regulations which may not be adequate for civil use. Two NVG civil certifications already exist for a FAR Part 27/29 rotorcraft flying under FAR Part 135 operations. There are other supplemental type certificate applications concerning NVG usage as well as waivers to the operating rules. Research and potentially flight testing is required immediately so the appropriate regulatory statements are written and adopted.

Output: Literature review of night vision goggle human factors certification issues.