January 16, 2014

The Honorable Bill Shuster  
Chairman, House Transportation and  
Infrastructure Committee  
House of Representatives  
Washington, DC  20515

Dear Mr. Chairman:

As required by the FAA Modernization and Reform Act of 2012, H.R. 658, Section 318, the Federal Aviation Administration (FAA) is pleased to provide the enclosed report.

Section 318 required the FAA to carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 of the Code of Federal Regulations (14 CFR) part 135 to use night vision goggles (NVG) during nighttime operations. In conducting the mandated study, the FAA was to consult with owners and operators of helicopters providing air ambulance services under 14 CFR part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. I am pleased to share with you the results of our work.

Identical letters have been sent to Chairman Rockefeller, Senator Thune, and Congressman Rahall.

Sincerely,

Michael P. Huerta  
Administrator

Enclosure
January 16, 2014

The Honorable John D. Rockefeller, IV
Chairman, Committee on Commerce,
Science, and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

As required by the FAA Modernization and Reform Act of 2012, H.R. 658, Section 318, the Federal Aviation Administration (FAA) is pleased to provide the enclosed report.

Section 318 required the FAA to carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 of the Code of Federal Regulations (14 CFR) part 135 to use night vision goggles (NVG) during nighttime operations. In conducting the mandated study, the FAA was to consult with owners and operators of helicopters providing air ambulance services under 14 CFR part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. I am pleased to share with you the results of our work.

Identical letters have been sent to Chairman Shuster, Senator Thune, and Congressman Rahall.

Sincerely,

Michael P. Huerta
Administrator

Enclosure
January 16, 2014

The Honorable John Thune
Committee on Commerce,
Science, and Transportation
United States Senate
Washington, DC 20510

Dear Senator Thune:

As required by the FAA Modernization and Reform Act of 2012, H.R. 658, Section 318, the Federal Aviation Administration (FAA) is pleased to provide the enclosed report.

Section 318 required the FAA to carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 of the Code of Federal Regulations (14 CFR) part 135 to use night vision goggles (NVG) during nighttime operations. In conducting the mandated study, the FAA was to consult with owners and operators of helicopters providing air ambulance services under 14 CFR part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. I am pleased to share with you the results of our work.

Identical letters have been sent to Chairmen Rockefeller and Shuster and Congressman Rahall.

Sincerely,

[Signature]

Michael P. Huerta
Administrator

Enclosure
January 16, 2014

The Honorable Nick J. Rahall, II
House Committee on Transportation
and Infrastructure
House of Representatives
Washington, DC 20515

Dear Congressman Rahall:

As required by the FAA Modernization and Reform Act of 2012, H.R. 658, Section 318, the Federal Aviation Administration (FAA) is pleased to provide the enclosed report.

Section 318 required the FAA to carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 of the Code of Federal Regulations (14 CFR) part 135 to use night vision goggles (NVG) during nighttime operations. In conducting the mandated study, the FAA was to consult with owners and operators of helicopters providing air ambulance services under 14 CFR part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. I am pleased to share with you the results of our work.

Identical letters have been sent to Chairmen Rockefeller and Shuster and Senator Thune.

Sincerely,

Michael P. Huerta
Administrator

Enclosure
Report to Congress:
Night Vision Goggles for Helicopter Pilots

FAA Modernization and Reform Act of 2012 (P.L. 112-95) – Section 318
# Table of Contents

1.0 Executive Summary .............................................................................................................. 1

2.0 NVG ARC Composition ....................................................................................................... 3

3.0 Methodology ....................................................................................................................... 5

   3.1 FAA Work Group .......................................................................................................... 5

   3.2 Feasibility Study Conducted by NVG ARC ................................................................. 5

   3.3 NVG ARC Final Report .............................................................................................. 6

4.0 Recommendation of the NVG ARC .................................................................................... 7

5.0 Conclusion ........................................................................................................................... 8


Appendix 2: NVG ARC Charter ............................................................................................. A2-1

Appendix 3: NVG ARC Final Report .................................................................................... A3-1
1.0 Executive Summary

This report responds to Section 318 of Public Law Number (Pub. L. No.) 112-95 (February 14, 2012), the FAA Modernization and Reform Act of 2012 (the Act). Section 318 required the FAA to carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 of the Code of Federal Regulations (14 CFR) part 135 to use night vision goggles (NVG) during nighttime operations. In conducting the mandated study, the FAA was to consult with owners and operators of helicopters providing air ambulance services under 14 CFR part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. Section 318 further required the FAA to submit a report to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate based on the study.

The FAA chartered the NVG Aviation Rulemaking Committee (ARC) on October 5, 2012, and tasked the committee with conducting the feasibility study required by the Act to determine the benefits, financial considerations, and risks associated with requiring the use of NVG. The members conducted the feasibility study, which included the following components:

- A literature review; and
- Deliberation of the considerations set forth by the FAA in the NVG ARC Charter.

The NVG ARC held its first meeting on October 11, 2012, and the last formal meeting with FAA participants occurred on November 2, 2012. The ARC presented its recommendation and conclusions to the FAA on November 14, 2012.

This report is intended to set forth the findings of the NVG ARC. The FAA has completed a preliminary review of the NVG ARC’s efforts and is in the process of evaluating the areas for further consideration raised by the members in the NVG ARC Final Report. The FAA is engaged in a rulemaking project that is considering certain requirements for air ambulance and commercial helicopter operations under 14 CFR parts 91 and 135. The Federal Register published the notice of proposed rulemaking (NPRM) “Air Ambulance and Commercial Helicopter Operations, Part 91 Helicopter Operations, and Part 135 Aircraft Operations; Safety Initiatives and Miscellaneous Amendments” on October 12, 2010. The Agency is in the process of coordinating the final rule.

---

1 See Appendix 1: Excerpt from the FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95.
2 See Appendix 2: NVG ARC Charter at ¶ 3.
3 See Appendix 3: NVG ARC Final Report.
4 75 FR 62640. (More information about this NPRM can be found at www.regulations.gov, in Docket No. FAA-2010-0982.)
While the ARC’s recommendation appears to align with current policy proposals under consideration, the Final Report raises additional areas for further consideration (including aircraft and equipment certification, as well as operational authorization issues) that may need to be addressed by the Agency as it continues to review and address the challenges facing helicopter air ambulance operators.
2.0 NVG ARC Composition

In order to facilitate the feasibility study and comply with the requirement to consult with helicopter air ambulance owners and operators, as well as aviation safety professionals, the FAA chartered the NVG ARC on October 5, 2012.

The FAA selected nine 14 CFR part 135 helicopter air ambulance operators to participate in the NVG ARC. To ensure balanced viewpoints and opinions, the FAA appointed three members representing large (over 50 aircraft) air ambulance operators, three members representing medium-size (15–50 aircraft) air ambulance operators, and three members representing small (less than 15 aircraft) air ambulance operators. All of the members are currently authorized to conduct NVG operations. Each organization selected at least one representative. Participants in the ARC represented the following helicopter air ambulance operators:

**Large Operators**
- Air Methods
- Air Evac EMS Inc.
- Metro Aviation, Inc.

**Medium Operators**
- Med-Trans Corporation
- Stat MedEvac
- TriState CareFlight, LLC

**Small Operators**
- Classic Helicopters
- Halo Flight, Inc.
- Travis County EMS

FAA participants in the NVG ARC included representatives of the following lines of business and service organizations:
- AAM, Office of Aerospace Medicine
- AFS, Flight Standards Service
- AGC, Office of the Chief Counsel
- APO, Aviation Policy and Plans
- ARP, Office of Airports
- AIR, Aircraft Certification Service
• ANG, NextGen and Operations Planning

• AVP, Office of Accident Investigation and Prevention

The Industry Chair of the NVG ARC was a representative of Air Methods. In addition to the participants and subject matter experts listed above, the FAA also assigned a Designated Federal Official from AFS to assist the ARC.
3.0 Methodology

In conducting this feasibility study, the NVG ARC focused its efforts on the question of whether the FAA should consider mandating the use of NVG by 14 CFR part 135 helicopter air ambulance pilots during nighttime operations. The ARC reviewed the information provided by the FAA and industry sources and conducted a literature review. The members deliberated the benefits, financial considerations, and risks associated with requiring the use of NVG considering the factors developed by the FAA work group and set forth in the NVG ARC Charter. The ARC also sought out additional information from the FAA and conducted its own research in developing its recommendation.

3.1 FAA Work Group

Prior to establishing the NVG ARC, the FAA convened an internal work group that included representatives from the FAA lines of business and service organizations listed above (dealing with different aspects of NVG policy). This internal work group considered the various factors associated with conducting a feasibility study to determine whether it is advisable for the FAA to mandate use of NVG by helicopter air ambulance operators during nighttime operations. The work group identified 24 considerations for the NVG ARC to analyze, and these considerations were incorporated into the charter establishing the NVG ARC.

3.2 Feasibility Study Conducted by NVG ARC

In accordance with the NVG ARC Charter, the scope of the feasibility study was limited to the single question of whether to mandate the use of NVG for helicopter air ambulance operators during nighttime operations.

Literature Review

The initial focus of the literature review was limited to human and environmental factors, but the ARC proposed and the FAA agreed to expand the scope of the review to include regulations, guidance material, and National Transportation Safety Board (NTSB) documents. Members initiated the process with a review of the reports compiled by the FAA participants, which primarily dealt with the impact of NVG on pilot workload. The ARC also conducted independent research on current regulations and FAA guidance, as well as NTSB accident/incident data and reports.

Discussion of Considerations in the NVG ARC Charter

The ARC deliberated and discussed the 24 considerations set forth in the NVG ARC Charter. The members reached consensus after studying and discussing each consideration. The FAA participants served as subject matter experts for the ARC during

---

5 NVG ARC Charter at ¶ 3.b.
6 NVG ARC Final Report, Appendix E, Index of Documents Reviewed.
its deliberations, and provided additional information and research to support the ARC’s efforts to evaluate each consideration.

Results of Feasibility Study

In reviewing the results of the feasibility study, the ARC discussed the safety benefits of NVG. However, the members emphasized that there are certain circumstances (such as brightly-lit urban environments) during which NVG are not always safe for nighttime operations because NVG do not provide adequate imagery under all lighting conditions, scene contrast, and atmospheric conditions. The ARC noted that the narrow scope of the study made it difficult for the members to recommend the mandate, since it would require NVG use during all nighttime operations.

Additional Considerations for the FAA

During the course of its literature review and discussions regarding the considerations set forth in the charter, the NVG ARC documented thirteen areas for further study by the FAA. The ARC noted the need to review the question of mandating NVG use after the Air Ambulance and Commercial Helicopter Operations, Part 91 Helicopter Operations, and Part 135 Aircraft Operations; Safety Initiatives and Miscellaneous Amendments rulemaking project is finalized. In addition, the members developed questions focused on equipage (including required equipment, modifications to equipment, and relief when certain equipment is inoperable); operational authorization required for NVG use; the limitations on NVG operations under the current regulations; and the adequacy of FAA resources dedicated to certification and surveillance of helicopter air ambulance operators.

3.3 NVG ARC Final Report

The NVG ARC submitted its Final Report to the FAA on November 14, 2012, setting forth its recommendation and additional considerations for further study.
4.0 **Recommendation of the NVG ARC**

In accordance with its charter, the NVG ARC made a recommendation on the feasibility of requiring pilots of helicopters providing air ambulance services under 14 CFR part 135 to use night vision goggles during nighttime operations. The ARC reached consensus on its recommendation after concluding its feasibility study, and the FAA participants did not join in the formulation of the recommendation.

The ARC did not recommend rulemaking that would propose a requirement on pilots of helicopters providing air ambulance services under 14 CFR part 135 to use NVG during nighttime operations.

In documenting its recommendation, the ARC noted concerns regarding the current operational and equipage requirements for NVG operations, the potential impact of the pending rulemaking on Air Ambulance and Commercial Helicopter Operations, Part 91 Helicopter Operations, and Part 135 Aircraft Operations; Safety Initiatives and Miscellaneous Amendments, and the availability of FAA resources to assist current operators and applicants seeking certification of equipment and operational authorization for helicopter NVG operations. As a result of the concerns cited, the members did not recommend a regulatory requirement for NVG use during all nighttime operations.

The members also identified several areas for further review by the FAA involving questions focused on equipage, operational authorization/limitations, and FAA certification/surveillance resources. This resulted from the discussion set forth in the NVG ARC Charter, as well as the analysis conducted by the ARC during the literature review. The ARC suggested that the FAA should consider further review of the question of whether to mandate NVG use during nighttime operations after the final rule is promulgated. The additional considerations submitted to the FAA involved questions focused on equipage, operational authorization/limitations, and FAA certification/surveillance resources.

---

7 75 FR 62640.
8 NVG ARC Final Report, Section 6.2, Additional Considerations for the FAA.
5.0 Conclusion

The intent of this report is to relay the results of the NVG feasibility study mandated by the Act, as set forth in the findings of the NVG ARC.

After conducting the feasibility study, the members did not recommend a proposal of a requirement to use NVG during nighttime operations, but they did suggest areas for further review by the FAA. The FAA has preliminarily reviewed the work of the NVG ARC and is considering the best methodology for addressing the additional areas for further review proposed by the ARC. The Agency will continue to evaluate the need for additional study or further rulemaking activity upon completion of a final rule in the Air Ambulance and Commercial Helicopter Operations, Part 91 Helicopter Operations, and Part 135 Aircraft Operations; Safety Initiatives and Miscellaneous Amendments rulemaking.

SEC. 318. FEASIBILITY OF REQUIRING HELICOPTER PILOTS TO USE NIGHT VISION GOGGLES.

(a) STUDY.—The Administrator of the Federal Aviation Administration shall carry out a study on the feasibility of requiring pilots of helicopters providing air ambulance services under part 135 of title 14, Code of Federal Regulations, to use night vision goggles during nighttime operations.

(b) CONSIDERATIONS.—In conducting the study, the Administrator shall consult with owners and operators of helicopters providing air ambulance services under such part 135 and aviation safety professionals to determine the benefits, financial considerations, and risks associated with requiring the use of night vision goggles.

(c) REPORT TO CONGRESS.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the results of the study.
Appendix 2: NVG ARC Charter

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Aviation Rulemaking Committee Charter

Effective Date: 10/05/12

SUBJECT: Section 318 Night Vision Goggles Feasibility Study

1. PURPOSE. This charter creates the Aviation Rulemaking Committee (ARC) for the Section 318 Night Vision Goggles Feasibility Study according to the Administrator's authority under Title 49 of the United States Code (49 U.S.C.) 106(p)(5). This charter also outlines the committee's organization, responsibilities, and tasks.

2. BACKGROUND. This ARC is necessary to comply with Section 318 of the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (the Act). Section 318 of the Act requires the Administrator to carry out a study on the feasibility of requiring 14 CFR part 135 air ambulance helicopter pilots to use Night Vision Goggles (NVG) during nighttime operations. The Act requires the Administrator to submit a report to Congress on the results of the study no later than February 14, 2013.

3. OBJECTIVES AND TASKS OF THE ARC. The ARC will provide a forum for the United States aviation community to discuss and provide recommendations to the FAA. The ARC will conduct a study on the feasibility of requiring pilots of helicopters providing air ambulance services under Title 14 Code of Federal Regulations (14 CFR) part 135, to use night vision goggles during nighttime operations. While conducting the study, the ARC will consider information from owners and operators of helicopters providing 14 CFR part 135 air ambulance services and aviation safety professionals to determine the benefits, financial considerations, and risks associated with the use of NVGs.
   a. The ARC will conduct a literature review and determine the benefits and risks associated with requiring the use of night vision goggles considering the following:
      1. Human and environmental factors (e.g., effects of eye pathologies on NVG use, fatigue, effects of recurrent use on human performance, effects of prolonged NVG use on color vision, effects on loss of dark adaptation and transition to night vision, lighting, weather, and terrain).
   b. The ARC will determine the benefits, financial considerations, and risks associated with requiring the use of night vision goggles considering the following:
      1. Obstacle lighting (LED vs. incandescent bulbs);
      2. Airport, hospital, and helipad lighting (LED vs. incandescent bulbs);
      3. Operational criteria for use (Risk assessment, safety analyses, costs associated with go/no-go based on NVG availability);
      4. Operational criteria for use (Specific language in the operations rules (14 CFR parts 135 and 91), updated operations specification paragraphs in 8900.1);
      5. Dispatch protocol (What dispatch and operations continuation considerations need to be addressed, how long will it take, and are there resources to support the effort?);
      6. Helicopter medical personnel using NVGs to assist with NVG-aided flight into unimproved landing sites;
      7. Second crewmember using NVGs to assist with NVG-aided flight into unimproved landing sites;

Initiated By: AFS-800
8. Assess single-crew pilot only (no other occupants using NVG) operations into unimproved landing zones;
9. Single pilot vs. dual pilot operations;
10. Operational requirements for single pilot operations;
11. Aircraft Make/Model specific NVG currency requirements/endorsements (§§ 61.57, 135.293);
12. Effects on rural communities (If there is one helicopter in a given region that has an NVG component become inoperable, and the mission could have been completed unaided, did the mandate prevent the mission from being completed?);
13. Minimum Equipment List Considerations (How does mandating NVG operations at night affect the Master Minimum Equipment List and the operator’s Minimum Equipment List?);
14. Autopilot requirements (Is an autopilot or some sort of stabilization system needed?);
15. Requiring pilot currency for instrument flight (Instrument Meteorological Conditions (IMC)) if NVGs are used (§135.207);
16. Size and scope of operation. (What are the effects of operator size and the geographic scope of the operations relative to operating with NVG?);
17. Effect on operational control;
18. NVG maintenance and aircraft configuration control;
19. Prior adverse operator experience with Night Vision Imaging Systems (NVIS) and mitigations used;
20. NVIS operational usage patterns and policy for use during nighttime operations (continuous vs. intermittent use during night operations as defined in 14 CFR 1.1: “Night means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time.”);
21. The known causes of civil NVG accidents worldwide;
22. Assess 14 CFR 135.207 requirements while using NVGs (Evaluate increased requirement for NVG inadvertent IMC recovery procedures); and
23. FAA approval of NVGs (approval methods to include NVG manufacturers and NVIS STC holders).

Recommendation Report. The ARC will make recommendations on the feasibility of requiring pilots of helicopters providing air ambulance services under 14 CFR part 135, to use night vision goggles during nighttime operations.

The ARC will submit a final report detailing recommendations no later than 2 months from the effective date of the charter.

4. ARC PROCEDURES.
   a. The ARC advises and provides written recommendations to the Associate Administrator for Aviation Safety, and acts solely in an advisory capacity. Once the ARC recommendations are delivered to the Associate Administrator for Aviation Safety, it is within her discretion to determine when and how the report of the ARC is released to the public.
   b. The ARC may propose additional tasks as necessary to the Associate Administrator for Aviation Safety for approval.
   c. The ARC will submit a report detailing recommendations within 2 months from the effective date of this charter. The chair of the ARC sends the recommendation report to both the Associate Administrator for Aviation Safety and the Director of the Office of Rulemaking.
d. The ARC may reconvene following the submission of its recommendations for the purposes of providing advice and assistance to the FAA, at the discretion of the Associate Administrator for Aviation Safety, provided the charter is still in effect.

5. ARC ORGANIZATION, MEMBERSHIP, AND ADMINISTRATION. The FAA will set up a committee of members of the aviation community. Members will be selected based on their familiarity with NVG, analysis, and regulatory compliance. Membership will be balanced in viewpoints, interests, and knowledge of the committee’s objectives and scope. ARC membership is limited to promote discussion. Active participation and commitment by members will be essential for achieving the ARC objectives. Attendance is essential for continued membership on the committee. When necessary, the ARC may set up specialized work groups that include at least one ARC member and invited subject matter experts from industry and government.

This ARC will consist of members from:

Industry:
- Air Methods Corporation (QMLA)
- Air Evac EMS, Inc. (EVCA)
- Metro Aviation (HDNA)
- Med Trans Corporation (M3XA)
- Stat Medevac (E3MA)
- Tristar Careflight (IFJA)
- Classic Helicopters (JAPA)
- Travis County EMS (LEUA)
- Halo Flight, Inc. (H7FA)

FAA:
- AFS, Flight Standards Service
- AAM, Office of Aerospace Medicine
- ANG-C1, Human Factors Research & Engineering Division
- ANG-E261, Airway Safety R & D Section
- AAS-100, Office of Airport Safety & Standards – Airport Engineering Division
- ASW-300, Aerospace Medical Division – Aerospace Medical, ASW
- ASW-100, Southwest Region – Aircraft Certification Service, Rotorcraft Directorate
- AVP-200, Office of Accident Investigation and Prevention – Safety Analytical Services Division
- APO, Aviation Policy and Plans

The Associate Administrator for Aviation Safety is the sponsor of the ARC and will select an industry chair(s) from the membership of the ARC and the FAA designated Federal official for the ARC. The FAA participation and support will come from all affected lines-of-business.

a. The ARC sponsor is the Associate Administrator for Aviation Safety who:
1. Appoints members or organizations to the ARC, at the sponsor’s sole discretion;
2. Receives all ARC recommendations and reports; and
3. Provides administrative support for the ARC, through the Flight Standards Service.

b. Once appointed, the industry chair(s) will:
1. Coordinate required committee and subcommittee (if any) meetings in order to meet the ARC’s objectives and timelines;
2. Provide notification to all ARC members of the time and place for each meeting;
3. Ensure meeting agendas are established and provided to the committee members in a timely manner;
4. Ensure meetings minutes are kept; and
5. Perform other responsibilities as required to ensure the ARC’s objectives are met.

6. COST AND COMPENSATION. The estimated cost to the Federal Government for the Section 318 Night Vision Goggles Feasibility Study ARC is approximately $40,000 annually. All travel costs for government employees will be the responsibility of the government employee’s organization. Non-government representatives, including the industry co-chair, serve without government compensation and bear all costs related to their participation on the committee.

7. PUBLIC PARTICIPATION. ARC meetings are not open to the public. Persons or organizations outside the ARC who wish to attend a meeting must get approval in advance of the meeting from a committee chairperson or designated federal official.

8. AVAILABILITY OF RECORDS. Consistent with the Freedom of Information Act, Title 5, U.S.C., section 522, records, reports, agendas, working papers, and other documents that are made available to or prepared for or by the committee will be available for public inspection and copying at the FAA Headquarters, Flight Standards Service, AFS-1, 800 Independence Avenue, SW, Washington, DC 20591. Fees will be charged for information furnished to the public according to the fee schedule published in Title 49 of the Code of Federal Regulations, Part 7.

You can find this charter on the FAA Web site at: http://www.faa.gov/regulations_policies/rulemaking/committees/documents/.

9. DISTRIBUTION. This charter is distributed to director-level management in the Office of the Associate Administrator for Aviation Safety, the Office of Aviation Policy and Plans, and the Office of Rulemaking.

10. EFFECTIVE DATE AND DURATION. This ARC is effective upon issuance of this charter. The ARC will remain in existence for 12 months unless sooner suspended, terminated, or extended by the Administrator.

The effective date of this charter is October 5, 2012.

[Signature]
Michael P. Huerta
Acting Administrator
Appendix 3: NVG ARC Final Report

This Appendix incorporates *A Report from the Aviation Rulemaking Committee for the Section 318 Night Vision Goggles Feasibility Study to the Federal Aviation Administration*, which was submitted by the NVG ARC to the FAA, through the Associate Administrator for Aviation Safety (its sponsor), on November 14, 2012.