

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.166

National Policy

Effective Date:
8/25/11

Cancellation Date:
8/25/12

SUBJ: Corrective Action Plan for Night Vision Imaging System Modifications
Provided by Ahlers Aerospace, Inc.

1. Purpose of This Notice. This notice provides guidance to principal maintenance inspectors (PMI) and principal avionics inspectors (PAI) dealing with Night Vision Imaging System (NVIS) lighting Supplemental Type Certificate (STC) modifications developed and shipped by Ahlers Aerospace, Inc. of Hurst, Texas.

2. Audience. The primary audience for this notice is Flight Standards District Office (FSDO) PMIs/PAIs with oversight responsibilities for helicopter emergency medical services (HEMS). The secondary audience includes Flight Standards Service (AFS) regional and headquarters offices.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Air carriers (operators) can find this notice on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. While the first-of-type Ahlers NVIS lighting STCs were properly evaluated and approved, the Rotorcraft Certification Office (RCO) has learned that other aircraft types were modified using variations of the original Ahlers NVIS lighting STCs. These aircraft were modified using Ahlers-developed kits with modified data and configurations that required FAA approval. Ahlers neither applied for, nor received FAA approval of the modifications before shipping 64 NVIS lighting modification kits to repair stations. AFS has become aware that those repair stations have modified aircraft with the unapproved Ahlers NVIS lighting modification kits and returned the aircraft to service. A member from the NVIS Special Emphasis Investigation Team (SEIT) informally contacted all of the PMIs/PAIs who oversee these aircraft and notified them of this issue.

5. Discussion. The Aviation Safety (AVS) organization has carefully evaluated the circumstances surrounding this issue and has made the following conclusions.

a. Return to Service. Although aircraft with Ahlers NVIS lighting modification kits may have been improperly returned to service, the immediate removal from NVIS operation and day/night readability assessments as part of the corrective action plan will address any potential safety concerns that must be corrected before further flight. Therefore, an operator can keep its aircraft with Ahlers NVIS lighting modification kits in service in accordance with the Ahlers Aerospace, Inc. NVIS Response Plan timelines and requirements.

Note: Aircraft inspected and returned to service under this notice will not require inspection for NVIS lighting as provided in N 8900.152, Special Emphasis Inspection of Night Vision Imaging System Lighting Installations. Refer to paragraph 7 below for verification procedures.

b. Corrective Action Plan. AVS has developed the Ahlers Aerospace, Inc. NVIS Response Plan to identify and resolve discrepancies pertaining to Ahlers NVIS lighting modification kits as described in subparagraph 5a above. The response plan contains a list of affected aircraft (provided by Ahlers), day/night readability assessments, and the operator's compliance acknowledgement. Potential NVIS safety concerns must be corrected within the timeline addressed by the response plan before further flight. The Aircraft Maintenance Division (AFS-300) has provided the Ahlers Aerospace, Inc. NVIS Response Plan to the PMIs/PAIs with oversight responsibility of the affected aircraft. The Ahlers Aerospace, Inc. NVIS Response Plan contains three steps:

(1) Step 1. Provide the operator of the affected aircraft with a copy of this notice and the response plan.

(2) Step 2. The operator performs the day/night compatibility check attached to the response plan.

(3) Step 3. A night vision goggle (NVG)-aided ground evaluation of the cockpit by a flight test pilot Designated Engineering Representative (DER) or Organization Designation Authority (ODA) unit member with NVG special authorization.

6. Action. PMIs/PAIs must provide a copy of this notice and the Ahlers Aerospace, Inc. NVIS Response Plan to the affected operator within 3 business days after the publication of this notice. Afterward, PMIs/PAIs must confirm that the operator has performed the evaluation described in the Ahlers Aerospace, Inc. NVIS Response Plan and has corrected all NVIS deficiencies.

7. Closure. The PMI/PAI must:

- Document all discrepancies found during the evaluations of the response plan and any corrective actions taken by the operator in the comments section of the Program Tracking and Reporting Subsystem (PTRS) record.
- Verify each step of the Ahlers Aerospace, Inc. NVIS Response Plan was completed and that all requirements for each step were accomplished.

- Enter all data into the PTRS when received from the operator.
- Create a separate PTRS entry for each aircraft listed in the Ahlers Aerospace, Inc. NVIS Response Plan.
 - Use PTRS code 4634/6634 (SURV/OPR/INSP NIT VISN IMG SYS).
 - Enter "N8900.166" in the "National Use" field.

8. Disposition. Since this is a special emphasis activity, we will not incorporate the information in this notice into FAA Order 8900.1. Direct questions concerning the information in this notice to the Aircraft Maintenance Division, General Aviation Branch (AFS-350) at 202-385-6429. Contact the Rotorcraft Directorate Standards staff at 817-222-5110 or the Rotorcraft Certification Office (ASW-170) at 817-222-5170 with questions regarding the performance of day/night readability evaluations specified in the Ahlers Aerospace, Inc. NVIS Response Plan.

for



John M. Allen
Director, Flight Standards Service