



MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

 Form Approved
OMB No. 2120-0020
11/30/2007

Electronic Tracking Number

For FAA Use Only

FSO EA-27

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.0 1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark United States of America N7284L	Serial No. AA5-0284	
	Make Grumman American	Model AA-5	Series Traveler
2. Owner	Name (As shown on registration certificate) Alvin G. Griffin Nancy L. Griffin	Address (As shown on registration certificate) Address 28410 Charles Street	
		City Mechanicsville, State MD	Zip 20659-3455 Country U.S.A.

3. For FAA Use Only

This data identified herein compiled with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in FAR-43.7

APPROVING INSPECTOR: *[Signature]*
DATE: *12-27-07*

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.
Name <u>Alvin G. Griffin</u>		<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer	
Address <u>28410 Charles Street</u>		<input type="checkbox"/> Foreign Certificated Mechanic	2000000	
City <u>Mechanicsville</u> State <u>MD</u>		<input type="checkbox"/> Certificated Repair Station		
Zip <u>20659-3455</u> Country <u>U.S.A.</u>		<input type="checkbox"/> Certificated Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <i>[Signature]</i> <i>12/31/07</i>
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7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <i>[Redacted]</i>	Signature/Date of Authorized Individual <i>[Signature]</i> <i>1/31/2008</i>
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NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

U.S.A. N7284L

12-27-07

Nationality and Registration Mark

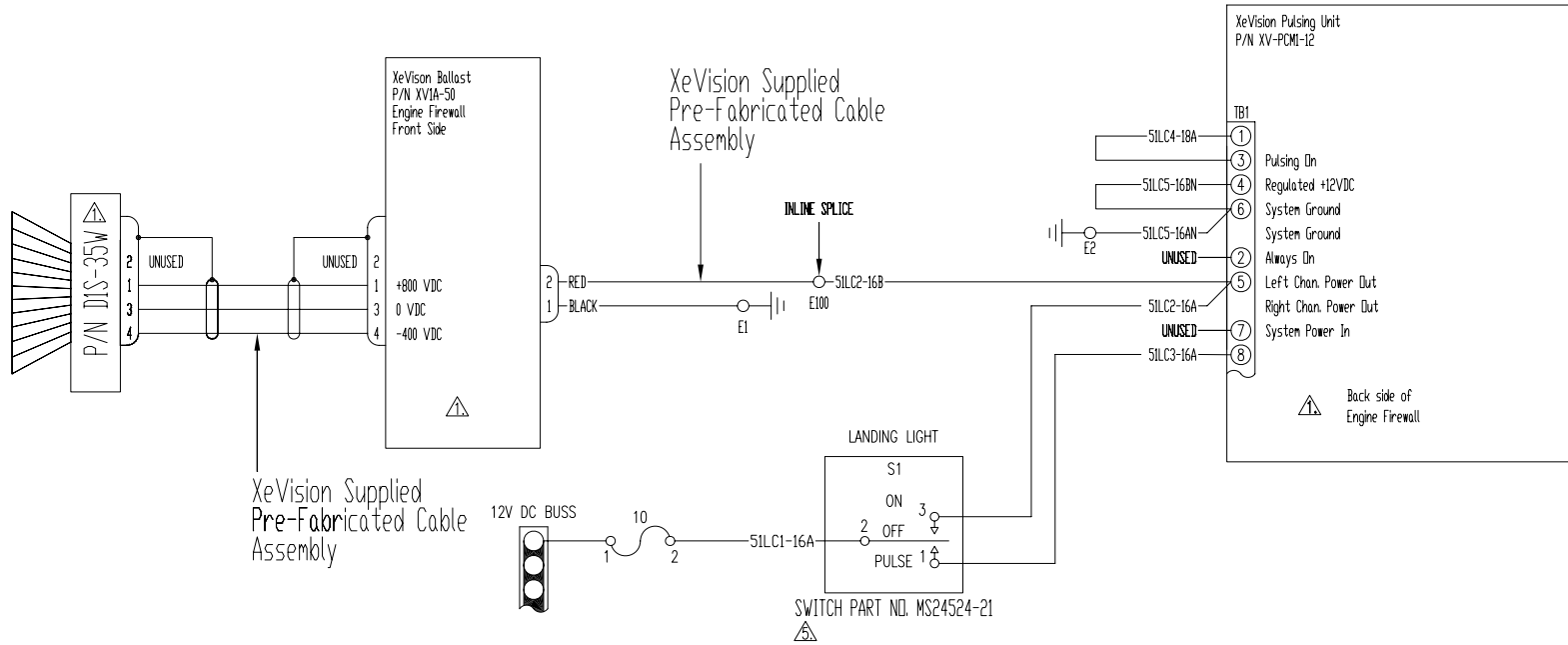
Date

Removed existing landing light from nose bowl. Installed XeVision High Intensity Discharge (HID) landing light assembly into the pre-existing light mount. Mounted ballast on engine side of firewall below vacuum line feed through with rivnuts and screws. Installed XeVision pulsing unit on the cabin side of the firewall using existing unused rivnuts. Installed three way switch conforming to MS24524-21 in original landing light switch location and labeled switch positions. The provided HID wire harness from the light to the ballast was routed directly and for chafe protection. All original aircraft landing light wire was removed back to the power source fuse. New wire conforming to MIL-W-22759/43-16 or -18, as appropriate, was used on all new wiring from the aircraft's 10 amp power supply fuse to the newly installed XeVision HID light components. An electrical load analysis was done IAW AC43.13-1B Chg.1, Paragraphs 35 a & e and loads were found to be less than 80% of the electrical system's rated load. All work was performed in accordance with the XeVision HID light Installation Instructions and AC43.13-1B Ch 11 (sec 3), Para. 11-31, (sec 4) Para 11-48. This HID light installation mimics previous field approved installations on other AA-5 series airplanes using this same light. Weight and balance changes from the installation were calculated and placed in the aircraft's records. The installation added 1.5 pounds of total weight to the airplane and no change in the Empty C.G. Arm calculated to 0.1 inches. New Weight & Balance data is: Empty Weight 1366.0 pounds, C.G. 84.4 inches, Moment 115227. New A/C Useful Load is 834 pounds.

The following are Instructions for Continued Airworthiness (ICA) for this altered airframe:

1. INTRODUCTION: This installation was accomplished to gain better landing light illumination and to increase the service life of the landing light. This light provides increased illumination levels while using half of the power of the light it replaces. An electrical load analysis is attached.
2. DESCRIPTION: Removed existing landing light and installed XeVision HID light.
3. CONTROL OPERATION: The lights are controlled with a three position switch with no special procedures. The UP position is ON-Steady, the MIDDLE position is OFF, and the DOWN position is ON-Pulsing.
4. SERVICE INFORMATION: The components are not field repairable and must be replaced with approved components.
5. MAINTENANCE INSTRUCTIONS: This lighting system is to be maintained in accordance with FAR Part 43.13. Inspections are to be performed in accordance with FAR 43.15.
6. TROUBLESHOOTING INFORMATION: If the circuit's fuse opens, replace the ballast unit. If the light does not illuminate, remove the lamp or ballast, verify function, and replace as required. Bench testing must be done in accordance with XeVision installation and operating instructions which contain warnings for bench testing.
7. REMOVAL & REPLACEMENT INFORMATION: The HID lamp is removed and installed in the same manner as the original lamp.
8. DIAGRAMS: Access to the lamp and ballast is by removing the cowling. See attached diagram for wiring schematic and component locations.
9. SPECIAL INSPECTIONS REQUIREMENTS: Not Applicable.
10. APPLICATION OF SPECIAL TREATMENTS: Not Applicable.
11. SPECIAL HARDWARE: Not Applicable.
12. SPECIAL TOOLS: Not Applicable.
13. COMMUTER CATEGORY AIRCRAFT: Not Applicable.
14. RECOMMENDED OVERHAUL PERIODS: Not Applicable.
15. AIRWORTHINESS LIMITATIONS: Not Applicable.
16. REVISIONS: To revise these Instructions for Continued Airworthiness, a letter will be submitted to the local Flight Standards District Office with a copy of the revised FAA Form 337 and revised ICA.
17. IMPLEMENTATION AND RECORD KEEPING: These Instructions for Continued Airworthiness are to be placed in the aircraft's permanent records and referred to during systems inspections and maintenance. Appropriate changes to the aircraft's weight and balance records have been recorded.

Additional Sheets Are Attached



NOTES: UNLESS OTHERWISE SPECIFIED

- 1. P/N's current at time of installation. Replacement parts shall be same or suitable current replacement P/N specified by Aero Visions International, Ogden, UT marketer of XeVision Lighting Products. (801) 622-7000. www.xevision.com
- 2. At a minimum, each wire shall be marked with a wire number sleeve located a maximum of 6 inches from each end. If wire marking equipment is available, wire will be marked at a maximum of 10 inch intervals along the wire.
- 3. Wiring practices shall be IAW SAE A550881, Latest revision.
- 4. Newly installed wire shall be MIL-W-22759/16, MIL-W-22759/34, or MIL-W-22759/43. The /43 wire is the preferred wire for its heat rating in the engine compartment
- 5. Install jumper wires between terminals 1&4, 2&5, and 3&6 in addition to connections shown on drawing for circuit redundancy.

TABLE 1

SWITCH POSITION	CONTINUITY BETWEEN TERMINALS
ON	2-3
OFF	NONE
PULSE	2-1

Grumman American AA-5 Traveler USA N7284L
 Serial Number AA5-0284
 XeVision HID Landing Light
 Electrical Schematic 2008/03/06
 DRAWN BY ALVIN GRIFFIN

SIZE	CAGE CODE	DWG. NO.	REV.
A	-	123456	B
SCALE	NONE	SHEET	1 OF 1