**MAJOR REPAIR AND ALTERATION**

(Airframe, Powerplant, Propeller, or Appliance)

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**INSTRUCTIONS:** Print or type all entries. See FAR 43.1, FAR 43 Appendix B, and AC 43.15-1 (revisions thereof) for instructions and the disposition of this form. This report is required by law (18 USC 1421). Failure to report can result in a civil penalty not exceed $1,000 for each such violation (Section 491 Federal Aviation Act 1958).

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Model</th>
<th>Serial No.</th>
<th>Nationality and Registration Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>CESSNA</td>
<td>182Q</td>
<td>18267001</td>
<td>N7882B</td>
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</tbody>
</table>

**Owner:**

Name (As shown on registration certificate):
LEACHMAN JAMES S

Address (As shown on registration certificate):
96 BUENA VISTA AVE
MILL VALLEY CA 94941-1243

Date: 07/09/2002

Signature: [Signature]

**Aircraft**

(As described in Item 1 above)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Model</th>
<th>Serial No.</th>
<th>Repair</th>
<th>Alteration</th>
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<tbody>
<tr>
<td>AIRFRAME</td>
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<tr>
<td>POWERPLANT</td>
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<td>PROPELLER</td>
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<tr>
<td>APPLIANCE</td>
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</tbody>
</table>

**Conformity Statement**

A. Agency's Name and Address

RICARDO MÁRTINEZ
14765 WATERS DR
SAN JOSE, CA 95127

B. Kind of Agency

[ ] U.S. Certified Mechanic
[ ] Foreign Certified Mechanic
[ ] Certified Repair Station
[ ] Manufacturer

C. Certificate No.

A&P: [Redacted]

I certify that the repair and/or alteration made to the unit(s) identified in Item 4 above and described on the hereinafter attached forms have been made in accordance with the requirements of Part 43 of the JARo Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date: 7/9/02

Signature of Authorized Individual: [Redacted]

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in Item 4 was inspected, in the manner prescribed by the Administrator of the Federal Aviation Administration and is

[ ] APPROVED
[ ] REJECTED

[ ] FAA Approved Inspection
[ ] Manufacturer
[ ] FAA Designee
[ ] Repair Station
[ ] Person Approved by Transport Canada Airworthiness Group

Date of Approval or Rejection: 7/9/02

Signature of Authorized Individual: [Redacted]
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 all 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.)

1. INTRODUCTION: THE ORIGINAL LANDING LIGHTS, TWO GE-4591 ARE PAR36 INCANDESCENT SEALLED BEAM LAMPS TOGETHER DRAWING 200W AT 28V (7.1 AMPs) AND HAS AN AVERAGE LIFE OF 25 HOURS.

2. DESCRIPTION: THIS SYSTEM HAS BEEN REPLACED WITH TWO ZENON GAS HIGH INTENSITY DISCHARGE LAMPS WITH AN EXPECTED LIFE OF OVER 5 YEARS TOGETHER DRAWING 60 WATTS (3.7 AMPs). PARTS INCLUDED IN THIS INSTALLATION ARE TWO PAR36 LAMP HOUSINGS, A PHILIPS XENON XD292 BALLAST (LANDING LIGHT), AN AEROS INTERNATIONAL, INC. XVL-280 BALLAST (TAXI LIGHT) WHICH IS ALSO MANUFACTURED BY PHILIPS AND HAS THE SAME ELECTRICAL PROPERTIES AS THE XD292 BALLAST. BOTH BULBS ARE PHILIPS ZENTRON D1S BULBS, AND BOTH BULB STARTERS ARE PHILIPS XENON STARTERS.

THE LAMPS ARE MOUNTED ON THE LOWER FORWARD ENGINE COWLING ADJACENT TO THE LANDING LIGHTS. INSTALLATION DONE USING AC43.13-2A, FIGURE 3.6 AS A GUIDE AND RESPECT TO USE OF A REINFORCING DOWEL OF THE SAME THICKNESS AND TYPE MATERIAL AS THE EXISTING CASING. BALLASTS ARE MOUNTED USING AN525-10R10 STRUCTURAL SCREWS, AN660 WASHERS, AND MS21044-3 NUTS.

CIRCUIT PROTECTION IS THE EXISTING AIRCRAFT LANDING LIGHT CIRCUIT BREAKER RATED AT 10 AMPS.

BASIS FOR PARTS ELEGIBILITY: SUPPLEMENTAL TYPE CERTIFICATE SA02041AT CURRENTLY UTILIZES SIMILAR PARTS AS PART OF THEIR APPROVED AIRCRAFT LIGHTING SYSTEM.

3. CONTROL, OPERATION INFORMATION: LAMP IS CONTROLLED WITH THE EXISTING AIRCRAFT LANDING AND TAXI LIGHT SWITCHES AND THERE ARE NO SPECIAL PROCEDURES.

4. SERVICING INFORMATION: COMPONENT PARTS ARE NOT FIELD REPAIRABLE AND MUST BE REPLACED WITH SERVICEABLE COMPONENTS.

5. MAINTENANCE INSTRUCTIONS: LIGHT SYSTEMS IS TO BE MAINTAINED IN ACCORDANCE WITH FAR PART 43, FIGURE 3.13. INSPECTIONS ARE TO BE PERFORMED IN ACCORDANCE WITH FAR PART 43.15. WIRING IS TO BE INSPECTED AT SCHEDULED ANNUAL OR 100 HOUR INSPECTIONS IN ACCORDANCE WITH AC43.13-1B CHAPTER 11. SWITCH IS TO BE MAINTAINED IN ACCORDANCE WITH APPLICABLE AIRCRAFT SERVICE PUBLICATIONS.

6. TROUBLESHOOTING INFORMATION: TROUBLESHOOTING OF ELECTRICAL WIRING IS TO BE DONE IN ACCORDANCE WITH ACCEPTED PRACTICES WITH THE POWER TO THE UNIT TURNED OFF TO AVOID POSSIBLE SHOCK ON THE HIGH VOLTAGE WIRE FROM THE POWER SUPPLY TO THE LAMP STARTER UNIT.

7. REMOVAL AND REPLACEMENT INFORMATION: THE PAR36 LAMP HOUSING IS REMOVED AND REPLACED IN THE SAME MANNER AS THE ORIGINAL LAMP AND SHOULD BE DONE IN ACCORDANCE WITH THE APPLICABLE AIRCRAFT SERVICE PUBLICATIONS. THE POWER SUPPLY IS MOUNTED TO THE LOWER FORWARD ENGINE COWLING ADJACENT TO THE EXISTING LANDING LIGHTS WITH AN525-10R10 SCREWS AND MS21044-3 NUTS USING STANDARD TORQUE VALUES. WIRING IS INSTALLED IN ACCORDANCE AC43.13-1B CHAPTER 11.

8. DATA: AC43.13-1B PARAGRAPH 7-40 FOR TORQUE VALUES OF MOUNTING HARDWARE. AC43.13-1B CHAPTER 11 FOR INSPECTION AND CARE OF ELECTRICAL SYSTEMS. AIRCRAFT SERVICE MANUAL OR APPROPRIATE SERVICE PUBLICATIONS FOR MAINTENANCE OF SWITCH AND AIRCRAFT WIRING.


10. IMPLEMENTATION AND RECORDKEEPING: THESE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ARE TO BE PLACED IN THE AIRCRAFT PERMANENT RECORDS AND REFERRED TO DURING AIRCRAFT SYSTEM INSPECTIONS AND MAINTENANCE. A MAINTENANCE ENTRY HAS BEEN MADE IN THE AIRCRAFT LOG BOOK REFERING TO THESE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS. AIRCRAFT WEIGHT AND BALANCE AND EQUIPMENT LIST HAVE BEEN UPDATED.