### **FAA-APPROVED** AIRPLANE FLIGHT MANUAL SUPPLEMENT **FOR STC SA10682SC**

#### **INSTALLATION OF**

Belt Driven Alternator Conversion TAL 12-70, TAL 24-70, TAL 24-70C

For Aircraft Make & Model Listed on Plane Power Alternator Conversion Approved Model List (AML)

| Registration No: |  |
|------------------|--|
| Serial No:       |  |

This supplement must be attached to the appropriate FAA Approved Airplane Flight Manual when the aircraft is modified in accordance with STC SA10682SC. The information contained herein supplements or supersedes the Airplane Flight Manual only in those areas listed herein. For limitations, procedures and performance information not contained in this supplement, consult the Airplane Flight Manual.

#### FAA APPROVED

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### **List of Effective Pages**

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When updating this supplement to a later FAA Approved revision level, remove the current List of Effective page and Log of Revision page and the pages to be replaced and insert the newly revised pages.

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## **Log of Revisions**

| Rev | Description   | Page                  | Approved by       | Date         |
|-----|---|-----------------------|-------------------|--------------|
|     | Original Release  | 1-13                  | SEE COVER<br>PAGE | 7/25/2007    |
| 1   | Change Name to HET all Pages.  Applied twin alternator info to Emergency procedures, steps 2 & 3.  Modify Normal Procedures para. | 1thru13<br>3-1<br>4-1 | SEE COVER<br>PAGE | JUL 2 0 2015 |

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General

#### **Forward**

This Airplane Flight Manual Supplement (AFMS) presents changes associated with the installation of Belt Driven Alternator Conversion kits, TAL 12-70, TAL 24-70 and TAL 24-70C.

### **Important Notice**

This supplement to the Airplane Flight Manual should be read carefully by the owner and/or operator in order to become familiar with the operation of the airplane. It contains limitations, operating procedures, performance information, and systems descriptions that are essential information for the pilot to properly operate the Make and Model aircraft that have been modified in accordance with STC SA10682SC. As specified, this supplement must accompany the basic Airplane Flight Manual and be available to the pilot at any time during flight. If a section has not been provided in this document, then refer to the basic Airplane Flight Manual.

### **Sections**

| This supplement is divided into the following sections: |
|---|
| Section 1 General                                       |
| Section 2 Limitations                                   |
| Section 3 Emergency Procedures                          |
| Section 4 Normal Procedures                             |
| Section 5   |
| Section 6   |
| Section 7 Airplane and Systems Description              |
| Section 8 Handling, Servicing and Maintenance           |

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General

### **Revising This AFM Supplement**

Each time this supplement is revised or reissued, a new Log of Revisions page is provided along with the pages containing corresponding data or changes. In the footer of each page is shown the approval date and revision letter (when applicable). When updating this supplement to a later FAA Approved revision level, remove the Log of Revision page and the pages to be replaced and insert the new Log of Revision page and revised pages. That portion of text or an illustration, which has been revised by the addition of, or change in, information is denoted by a solid revision bar located adjacent to the area of change, and placed along the outside margin of a page. Revision bars show only information changed within latest revision.

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## Section 1 General

The alteration to the aircraft was performed using a kit that includes (2) alternators, (2) alternator mounting kits, (1) LEFT ALT INOP placard, (1) RIGHT ALT INOP placard, (1) LEFT ALT FIELD placard, (1) RIGHT ALT FIELD placard, (2) regulators, (2) alternator inoperative lamps, and installation instructions to replace generators on twin engine aircraft which are listed in the Approved Model List of STC SA10682SC.

The alternators and associated regulators will provide increased output at low engine RPM over that of the original generators. The installed kit balances the electrical load between the two alternators and for operation of either alternator with the other disabled or failed.

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### Section 2 Limitations

Unchanged.

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# Section 3 Emergency Procedures

## Battery discharging indication or LEFT ALT INOP or RIGHT ALT INOP lamps illuminated.

- 1. Reduce electrical load.
- 2. Check left and right alternator field circuit breaker.
  - A. If tripped, turn off LEFT ALT FIELD or RIGHT ALT FIELD switch and reset breaker.
  - B. Turn on LEFT ALT FIELD or RIGHT ALT FIELD switch.
  - C. If breaker trips again, turn off LEFT ALT FIELD or RIGHT ALT FIELD switch and land as soon as practical.
- 3. Check left and right alternator output circuit breaker.
  - A. If tripped turn off LEFT ALT FIELD or RIGHT ALT FIELD switch and reset breaker.
  - B. Turn on LEFT ALT FIELD or RIGHT ALT FIELD switch.
  - C. If breaker trips again, turn off LEFT ALT FIELD or RIGHT ALT FIELD switch and land as soon as practical.

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## Section 4 Normal Procedures

After turning on MASTER switch and before starting engines, verify that LEFT ALT INOP and RIGHT ALT INOP lamps are illuminated. After starting engines, switch the LEFT ALT FIELD and RIGHT ALT FIELD switches on. Observe battery charging indication and that LEFT ALT INOP and RIGHT ALT INOP lamps are not illuminated.

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Section 5 Performance

### **Section 5 Performance Data**

Unchanged.

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# Section 6 Weight and Balance

There are no changes to the aircraft weight limits or center of gravity (CG) limits. See the basic Airplane Flight Manual for weight and center of gravity information.

The Equipment List / Weight and Balance Record are revised by the STC installer for installation of this Belt Driven Alternator Conversion. For current empty weight and CG, see revised weight and balance record.

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# Section 7 Airplane and Systems Description

The installed alternator conversion kit provides up to a maximum of 70 amps at the rated voltage, limited by current wiring and breakers.

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Handling, Service, and Maintenance

# Section 8 Handling, Service, and Maintenance

The basic AFM is unchanged. See Instructions for Continued Airworthiness provided with this installation for details on inspections and maintenance.

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