

United States Of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA00302BO

*This Certificate issued to* Aerodyme Corp.  
274 Valley Road  
South Burlington, VT 05403

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations.*

*Original Product Type Certificate Number:* A12SO

*Make:* Commander

*Model:* 112, 112B

*Description of Type Design Change:*

Installation of a Lycoming IO-390-A1A6 engine and MT-Propeller MTV-12-B/188-59b propeller, or a Lycoming IO-390-A3A6 engine and a Hartzell HC-E3YR-1RF/F7392 propeller, in accordance with Aerodyme Corp. Model 112 210HP Engine Installation Instructions, Document Number AD1125-02, Revision 02, dated January 28, 2012, or later FAA-approved revisions.

*Limitations and Conditions:*

1. Aerodyme Flight Manual Supplement for Lycoming IO-390 in Rockwell/Commander Model 112 and 112B, Document Number AD1127-02, revision 02, dated February 17, 2012, or later FAA-approved revisions, is required and must be carried in the aircraft during all flights.
2. Instructions for Continued Airworthiness (ICA), Document Number AD1126-02, Revision 02, dated January 12, 2012, or later accepted revisions, shall be made available to the operator at the time of installation.

(Limitations and Conditions continued on page 3 of 4)

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* December 11, 2008

*Date reissued:*

*Date of issuance:* July 2, 2010

*Date amended:* February 17, 2012

*By direction of the Administrator*



(Signature)

Robert G. Mann  
Manager  
Boston Aircraft Certification Office

(Title)

United States Of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**  
(Continuation Sheet)

*Number* SA00302BO  
Effective Date: February 17, 2012

*Limitations and Conditions Cont'd:*

3. The installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft.

*Certification Basis:*

Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for the Commander 112/112B engine and propeller change is as follows:

- a. The type certification basis for the Commander 112/112B airplanes is shown on TCDS A12SO for parts **not changed or not affected** by the change.
- b. The certification basis for parts **changed or affected** by the change since the reference date of application, December 11, 2008, is based upon part 23 as amended by Amendment 23-58. Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for this modification was determined to be:

**Regulations at the latest amendment 23-0 through 23-58**

23.29, 23.33, 23.53, 23.65, 23.71, 23.75, 23.77, 23.143, 23.201, 23.203, 23.207, 23.251, 23.361, 23.363, 23.471, 23.603, 23.605, 23.611, 23.613, 23.623, 23.865, 23.901, 23.903, 23.905, 23.907, 23.925, 23.955, 23.1047, 23.1091, 23.1093, 23.1101, 23.1103, 23.1105, 23.1107, 23.1303, 23.1305, 23.1323, 23.1521, 23.1541, 23.1543, 23.1549, 23.1557, 23.1581, 23.1583

**14 CFR Part 36 Amendment 28**

# Supplemental Type Certificate

(Continuation Sheet)

*Number* SA00302BO

Effective Date: February 17, 2012

*Type Certificate Data Sheet:*

Commander TCDS A12SO is modified for this STC as follows:

Model 112/112B

Engine	Lycoming IO-390-A1A6
Fuel	100/130 minimum grade aviation gasoline
Engine Limits	For all operations, 2700 rpm (210 hp)
Propeller and Propeller limits	MT Constant Speed, Model MTV-12-B Blade, Model 188-59b (small letter designates modifications that do not affect interchangeability of blade sets) Pitch: High $30^{\circ} \pm 1^{\circ}$ , Low $11.5^{\circ} \pm 0.2^{\circ}$ at Reference Radius 27.75" Diameter: Not over 74", no reduction allowed. Governor: MT P-860-4 Spinner: MT P-1005-3 Limitations: None

OR

Engine	Lycoming IO-390-A3A6
Fuel	100/130 minimum grade aviation gasoline
Engine Limits	For all operations, 2700 rpm (210 hp)
Propeller and Propeller limits	Hartzell Constant Speed, Model HC-E3YR-1RF/F7392 Blade: Model F7392 Pitch: High $30^{\circ} \pm 1^{\circ}$ , Low $11.2^{\circ} \pm 0.2^{\circ}$ at Reference Radius 30" Diameter: Not over 75", not under 65" Governor: Edo-Aire 34-828-014 or Edo-Aire 34-828-014-2 Spinner: Hartzell C-3535-1(P) Limitations: None

-END-