

United States of America
Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SA3027SO

This certificate, issued to Basic Aircraft Products, Inc.
4474 Hickory Drive
Evans, GA 30809

*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 04 of the Civil Air
Regulations.*

Original Product — Type Certificate Number: A-696
Make: Aircraft Acquisition Corp. (Taylorcraft)
Model: BC12-D

Description of Type Design Change: Installation of the Basic Aircraft Products, Inc.,
Air Driven Alternator, Type BPE-14, Model 1008 in accordance with Basic Aircraft
Products, Inc., Master Parts List & Drawing Package Rev. D, dated 8/27/90,
Taylorcraft Installation Kit, Dwg. 46-1008-101 Rev. A, dated 2/4/91, and
Installation Manual No. 80-1008-201, for Taylorcraft Model BC12-D aircraft dated
2/12/91, or later FAA Approved revisions.

Limitations and Conditions: This approval should not be extended to other
aircraft of this model on which other previously approved modifications are
incorporated unless it is determined by the installer that the interrelationship
between this change and any of those other previously approved modifications will
produce no adverse effect upon the airworthiness of that airplane. FAA Approved
Airplane Supplementary Flight Manual, dated October 8, 1991, is a required part of
this STC. This STC is applicable only to those model BC12-D aircraft without any
existing electrical power.
*This certificate and the supporting data which is the basis for approval shall remain in effect until sur-
rendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the
Federal Aviation Administration.*

Date of application: June 18, 1990

Date issued:

Date of issuance: October 8, 1991

Date amended:

By direction of the Administrator



John Tigue (Signature)
Manager, Atlanta Aircraft
Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

BASIC AIRCRAFT PRODUCTS, INC.
4474 Hickory Drive
Evans, GA 30809

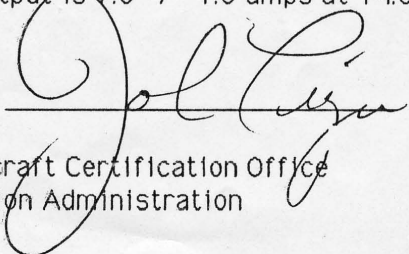
FAA APPROVED
AIRPLANE SUPPLEMENTARY FLIGHT MANUAL
for

Taylorcraft Aviation Corporation Model No. BC12-D
Registration No. N26658
Serial No. 2000

This Supplementary Flight Manual must be carried in the airplane whenever the Basic Model 1008 Air Driven Alternator is installed in accordance with Supplemental Type Certificate SA302750. The information contained in this document supplements or supercedes the airplane placards and markings only in those areas listed. For limitations, procedures and performance information not contained in this Supplementary Flight Manual, consult the basic airplane placards and markings.

- I. LIMITATIONS: There are no aircraft limitations for the certified alternator installation.
- II. PROCEDURES:
 1. Preflight: Check rotation of the impeller, which should spin freely. (NOTE: normal operation of alternator includes moderate starting torque and magnetic cogging.)
 2. Starting: Alternator should begin rotation at approximately 1600 RPM engine speed.
 3. Master Switch: Turn on Master Switch after engine start.
 4. Taxi out & Run-up: Maintain minimal electrical load.
 5. Take-off & Cruise: Turn on desired equipment.
 6. Maintenance: None required.
CAUTION: Do not spray solvent or degreaser on alternator. This can cause bearing failure and damage electrical components. If cleaning is necessary, dampen cloth with cleaner and wipe surfaces to be cleaned.
- III. PERFORMANCE: At engine cruise power setting, the alternator output is 7.0 +/- 1.0 amps at 14.0 +/- 0.5 Vdc.

FAA Approved



Manager, Aircraft Certification Office
Federal Aviation Administration
Atlanta, GA

Date OCT 8 1991

Page 1 of 1

Installed 12-11-92

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE Taylorcraft	MODEL BC-65
	SERIAL NO. 2000	NATIONALITY AND REGISTRATION MARK N 26658
2. OWNER	NAME (As shown on registration certificate) Uteg, Francis F.	ADDRESS (As shown on registration certificate) 503 Washington Drive Fairhope, Al. 36532

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****			X	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Carl J. Lund 138 Myrtlewood Lane Mobile, Al. 36608	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & E 3422
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

DATE July 1, 1980	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Carl J. Lund</i>
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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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/>	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION 7 July 1980	CERTIFICATE OR DESIGNATION NO. 1892023	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Edward L. Heeter</i> Edward L. HEETER			

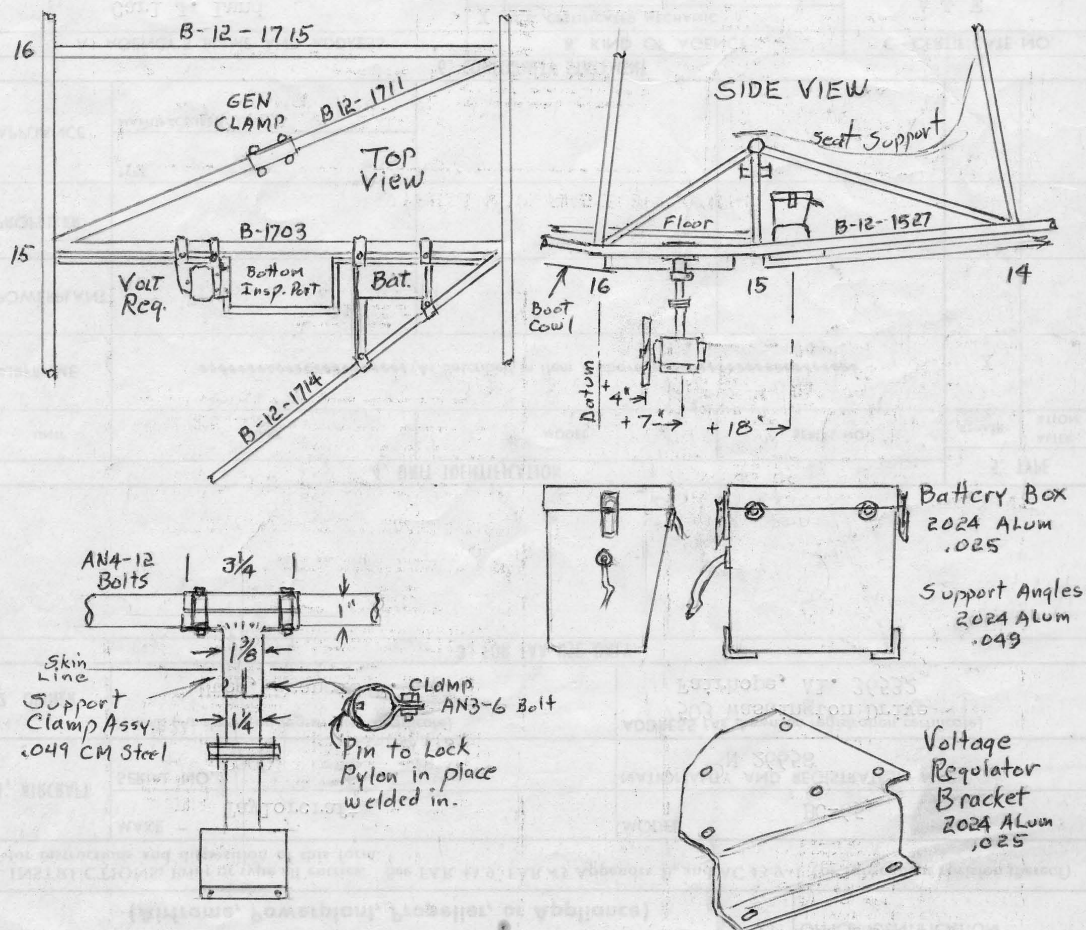
NOTICE

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.)

Installed Air Driven Generator - Prestolite p/n 141, Regulator p/n 137 and propeller p/n 139 and mount p/n 140 as per engineering drawing attached except for a modification to the attach fitting to accommodate to Taylorcraft. Structural members are numbered according to Taylorcraft Model B Manual station diagram. Mount tested to 50 Lb. rearward force with no distortion or movement of the support tube.

Fabricated battery box of 2024 alum. per attached sketch to hold 12 volt ESB Model 12-J-10 manifold vented, non-spill battery and a bracket to support the Prestolite V-80-4201-AE 12 volt-10Amp Voltage Regulator.



F. A. A. APPROVAL

TYPICAL WIRING DIAGRAM

FEDERAL AVIATION AGENCY
CENTRAL REGION
460 TOWER AVENUE
KANSAS CITY 10, MISSOURI

OCT 17 1962

Mr. Richard I. Ward, President
Ward Aero Incorporated
Bailey Airport
Three Rivers, Michigan

Dear Mr. Ward:

This letter pertains to your propeller drawing p/n WA-1A-10-1 dated 2/18/62, propeller drawing p/n WA-414 dated 2/10/62, bracket drawing p/n WA-MT-1 dated 5/1/61, and generator drawing p/n WA-MD-12-10-1 dated 6/15/59.

We have evaluated the descriptive data above and the tests conducted on these parts. These parts appear to be satisfactory for installation on light aircraft provided the installation complies with the applicable Civil Air Regulations. At least the following should be considered:

- It should be determined the propeller and generator conform to the above drawings. Unless the parts bear evidence of parts manufacturer approval or have a Form AOA 106 tag attached, a conformity and compliance inspection should be accomplished before they are installed.
- The propellers should not be installed on aircraft whose "never exceed" speed or "slide or climb" speed, listed in the Aircraft Specification, exceeds the following propeller-speed limits:

Propeller p/n	Maximum Airspeed
WA-1A-10-1	150 mph
WA-414	250 mph
- The bracket installation should withstand a force of at least 50 pounds applied 180° aft direction at the generator end of the bracket.
- The wire and wire sizes should conform to aircraft standards. The circuit should be protected and provided with an ON/OFF switch.
- Personnel and critical airplane parts in an arc plus or minus 5° from the plane of the propeller should be adequately protected. (See CAR 3.381(b)).
- The installation should not induce any undesirable vibration or other conditions to the airplane during flight.
- The battery installation should be made in accordance with acceptable standards.

Please do not quote this letter unless you quote it in its entirety.

Sincerely,

Walter J. O'Toole
Chief, Engineering and Manufacturing Branch

WIRING NOTES

- 1- ALL WIRE #16 EXCEPT ARMATURE USE #10 HERE (AN-J-C-48A)
- 2- ALL SWITCHES AND FUSES SHOULD BE ACCESSIBLE IN FLIGHT; MASTER SWITCH TO BE A MAXIMUM OF 24 INCHES FROM BATTERY

REGULATOR
BUS BAR - TO LOADS
20 A FUSE - MASTER SW.
15-0-15 AMMETER
4 A FUSE
FIELD SW.
GENERATOR

WIND DRIVEN GENERATOR KIT - GENERAL INFORMATION -

WARD AERO, INC.
THREE RIVERS, MICHIGAN, U.S.A.

DRAWN BY	SCALE	MATERIAL
R. J. LION A.	NO SCALE	
DATE	DATE	DRAWING NO.
10-15-62	10-15-62	W-4
APPROVED	APPROVED	
(Signature)	(Signature)	

TYPICAL MOUNTING FABRICATIONS

① FABRICATE 2 PLATES FROM KIT MATERIAL - WELD EQUAL DISTANCE FROM CYLINDERS TO PLATES TO STAKE HOLE. DO NOT STAKE PLATES.

② DRILL 4 HOLES - SAME SIZE AND SPACING AS GEAR "V"

③ FABRICATE FROM MATERIAL PROVIDED IN KIT WA-MT-1. CHECK FOR LANDING GEAR CLEARANCE WITH WEIGHT OFF GEAR - TRIM TO CLEAR.

④ DRILL 2 HOLES 3/8 DIA AFTER LOCATING POSITION.

TYPICAL CUB SERIES MOUNT

TYPICAL AERONA SERIES MOUNT

TYPICAL LUSCOMBE MOUNT - SHOCK SYSTEM - RECOMMENDED - OTHER AIRCRAFT TOO

NOTES:

- 1- FABRICATE BOX AND SHOCK MOUNTING PLATES FROM 16 GAUGE STEEL REQUIRED IN MOUNT KIT FROM WA-MT-1
- 2- TORQUE 4 SHOCK PAD BOLTS TO COMPRESS WEDGERS ABOUT 1/8" MINIMUM
- 3- ALL BEND RADIUS 2-4 X MAT. THICKNESS
- 4- 3/8" BOLT
- 5- 2- AN 980-10 WHEL
- 6- AN 981-3-B GRONNET
- 7- 2- 2 X 2 X 3/8 SHOCK PLATES 16 GA.
- 8- 2- SPRING RIBS (REQUIRED)
- 9- AN 288-1032 NUT 1

SECTION - A-A

WARD AERO INCORPORATED
THREE RIVERS, MICHIGAN, U.S.A.

TYPICAL AIR DRIVEN GENERATOR MOUNT FABRICATION

NO.	DATE	BY
1	9-13-63	R.M.S.
2		
3		
4		
5		

DRAWN BY	SCALE	MATERIAL
R. J. LION A.	NO SCALE	16 GA. STEEL FORMING
DATE	DATE	DRAWING NO.
9-13-63	9-13-63	W2
APPROVED	APPROVED	
(Signature)	(Signature)	

GENERAL NOTES

- THE BRACKET MUST BE CAPABLE OF WITHSTANDING AT LEAST A 50 LB. PULL AFT - AT THE GENERATOR END OF BRACKET, WHEN MOUNTED.
- ASSEMBLY MUST BE RIGGED PARALLEL TO LINE OF FLIGHT AND CENTER LINE OF FUSELAGE
- ALL WELD RADIUS SHOULD BE 1/8 INCH, MINIMUM
- ZINC CHROMATE PRIME AN PAINT COLOR OF YOUR CHOICE
- THESE DRAWINGS ARE TO BE USED ONLY AS A GENERAL GUIDE - CHECK AGAINST YOUR OWN MEASURED DIMENSIONS

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE Taylorcraft	MODEL BC-65
	SERIAL NO. 2000	NATIONALITY AND REGISTRATION MARK US N26658
2. OWNER	NAME (As shown on registration certificate) Francis F uteg	ADDRESS (As shown on registration certificate) 300 Wild Heron Dr St. Simons Island, Ga 31522

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE Air Driven Alternator				
	MANUFACTURER Basic Acft. Products				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
J. Max Bradley 102 Cater St. St. Simons Island, Ga 31522	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER	1708503

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

DATE December 15, 1992	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>J. Max Bradley</i>
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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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION 12-15-92	CERTIFICATE OR DESIGNATION NO. 1708503	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>J. Max Bradley</i>		

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.)

Installed Air Driven Alternator - Basic Aircraft Products Inc. - Part # 50-1008-101, Type BPE-14, Model 1008, Serial # 1028 as a direct replacement for the Wag Aero Wind Driven generator which was previously installed July 1, 1980. Alternator was installed per engineering drawings and in accordance with the supplemental flight manual provided by Basic Aircraft Products Inc. Installation was tested for 30 lbs. rearward force, 20 lbs. vertical force, 7 lbs. lateral force as specified with no distortion or movement of the support tube or alternator housing.
STC # SA302750 dated October 8, 1991 is attached.
Weight and balance of the aircraft has been revised to reflect this installation.

END

ADDITIONAL SHEETS ARE ATTACHED STC # SA302750