RECEIVED JUL 24 1995 FAA

U.S. Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
NE-FSDO-03

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Taylorcraft	Model: BC12-D
	Serial No.: 8727	Nationality and Registration Mark: N66DX
2. Owner	Name *(As shown on registration certificate)*: GARABEDIAN, JOHN H	Address *(As shown on registration certificate)*: 24 FAIRVIEW DRIVE SOUTHBOROUGH, MA 01772

3. For FAA Use Only

~~The alteration identified herein complies with the~~ applicable airworthiness requirements and is approved for the above-described aircraft, subject to conformity inspection by a person authorized in FAR Section 43.7.

7/19/95 — Date

Signature of FAA Inspector — NE-03

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	5. Repair	5. 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.
ROSS PHIPPS 69 OREGON RD. SOUTHBOROUGH, MA 01772	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	17542172 A&P

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: 7/3/95

Signature of Authorized Individual: Ross Phipps

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	✓	Inspection Authorization	Other *(Specify)*
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
JULY 19, 1995	1695670	Howard J. Fuller, Jr.

FAA Form 337 (12-88)

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.)

Installation of Jasco Alternator system #6555 for Continental engines.

The system consists of a Jasco alternator model #6560T, a Jasco controller model #J12M20SP, and #6540-6555 installation instructions.

1) Removed existing generator (Delco-Remy #1101876) from engine.

2) Installed Jasco Alternator System #6555 in accordance with Jasco #6540-6555 installation instructions. Skytronics STC # SA971WE (Cessna 150) used as a guide only.

3) Located circuit breakers specified, Potter/Brumfield P/N's W23X1A1G-10 and W23X1A1G-50 on instrument panel with other aircraft circuit breakers located 2" to the left and 2" above the right control column. Located circuit breaker/switch, Potter/Brumfield P/N W31X2M16-5 for the field in the center of the instrument panel 2" from the bottom edge with the other aircraft switches.

4) Identified circuit breakers and circuit breaker/switches with placards.

5) Located controller on the foward side of the firewall 10" in from the right side and 9" up from the bottom.

6) Located cold air inlet to blast tube in the left front cowl cutout 2 1/2" to the left and 1" down from the cold air inlet for the cabin heat.

7) In accordance with note #4 on the wiring diagram a 10 amp Potter/Brumfield P/N W23X1A1G-10 circuit breaker was used because of the corresponding 18AWG wire used.

8) System operationally checked OK.

9) Jasco installation instructions attached.

----------END----------

☒ Additional Sheets Are Attached 4 pages

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

SKYTRONICS, INC.

POST OFFICE BOX 807
227 OREGON STREET
EL SEGUNDO, CALIF.
(ZIP CODE - 90245)
PHONE (213) 772-3231
T E L E X 653-454

JASCO ALTERNATOR SYSTEM "E" & "C" SERIES

CONTINENTAL ENGINES

MODEL 6560T 12 VOLT 50 AMP

INSTALLATION INSTRUCTIONS

STC No.	SA999WE	Beech 35 "A" thru "G" and 35 "R"
STC No.	SA971WE	Cessna - 150 - 170 - 172 - 175
STC No.	SA1246WE	Navion and Navion "A"

1. Remove RH magneto, tach shaft adapter, generator and gaskets from the rear accessory case.

2. Remove drive gear assembly from your generator and install on alternator shaft, provided parts are in servicable condition. If any parts need replacement the following parts are available from your Continental distributor:

1 each	352029	Hub
1 each	352030	Retainer
2 each	626543	Bushing Rubber
1 each	530412	Nut
1 each	2501	Cotter Pin
1 each	530997	Gear-Drive

3. Note: It may be necessary in engines with Thompson TF1900 fuel pumps to loosen the four mounting nuts and let the fuel pump drop slightly in order to install the alternator. If governor drive adapter is installed under pump, on Bonanza with hydraulic prop, some metal may have to be removed from govenor drive adapter flange nearest alternator to provide clearance.

4. Install the alternator alinging the cutout in the housing with the tach shaft drive adapter. Install with new mounting pad gasket.

5. Install tach drive adapter and shaft, and safety wire in an approved manner.

6. Install RH magneto and time with engine.

7. Install air blast tube to the alternator. Be sure induction end is directed to unobstructed slip stream. Good alternator cooling is a must. The 6560T Alternator is equipped with a 2" blast cover opening, as opposed to 1" as used on the earlier model. This improves cooling which is important especially in long engine idle periods.

8. Tighten fuel pump nuts.

9. Disconnect electrical wiring from generator voltage regulator and remove the voltage regulator from its present location.

10. Install JASCO J12M20 Voltage Regulator and SVP-3 Voltage Peak Protector in coolest possible area. It is suggested that the regulator have 1/4" flat spacers placed between mounting surface and regulator to allow for air circulation.

11. For electrical hookup, refer to electrical schematic for voltage regulator and voltage protector wiring and splices to alternator (see wiring schematic).

12. All workmanship and material to be in accordance with FAR43-13-2.

13. With alternator (generator) switch off, start the engine and operate at normal run speed after activating switch to on position. Check rpm's and ammeter for proper operation of the alternator.

14. Recheck and inspect the entire installation. Complete any necessary forms, make log book entry and add to the aircraft equipment list.

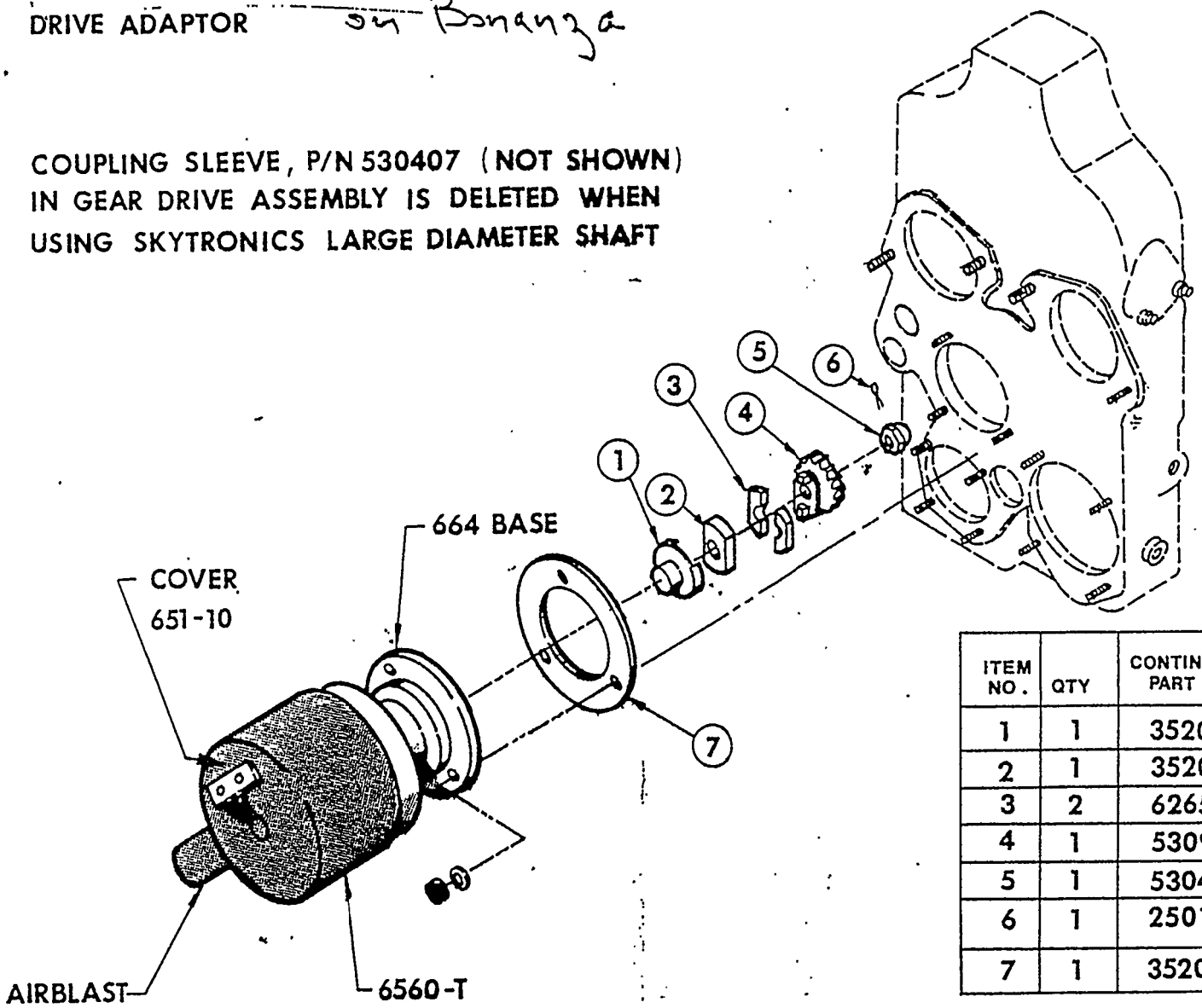
15. Correct drive Coupling Assembly.

Assembly of the Continental Gear Drive to the 6560T Alternator must be accomplished without undue crush applied to the rubbers blocks (626543 Bushings). The tolerance accumulation of the Drive parts and Alternator Shaft and Internal parts can amount to over .040". When the Drive Assembly is installed a wide range of preload could be applied to the rubber blocks including extruding them out behind the gear.

Skytornics suggests a preload on the rubber blocks of .005 to .008". This can be accomplished as follows; Assemble the Hub Rubber Blocks, Gear & nut on the shaft, leaving out the retainer (668-2) which is .031 thick. Measure the clearance between the rubber blocks and the gear with a feeler gage. Subtract this figure from the retainer thickness (.031) and this will be the preload when the retainer is installed. If it is greater than .005 - .008 machine the backside of the coupling, the difference between the above calculated figure and the correct preload.

ALTERNATOR IS DESIGNED TO BE INSTALLED WITH THE AIRBLAST AT 9 O'CLOCK POSITION. DIMPLE IN HOUSING PROVIDES CLEARANCE FOR GOVERNOR DRIVE ADAPTOR on Bonanza

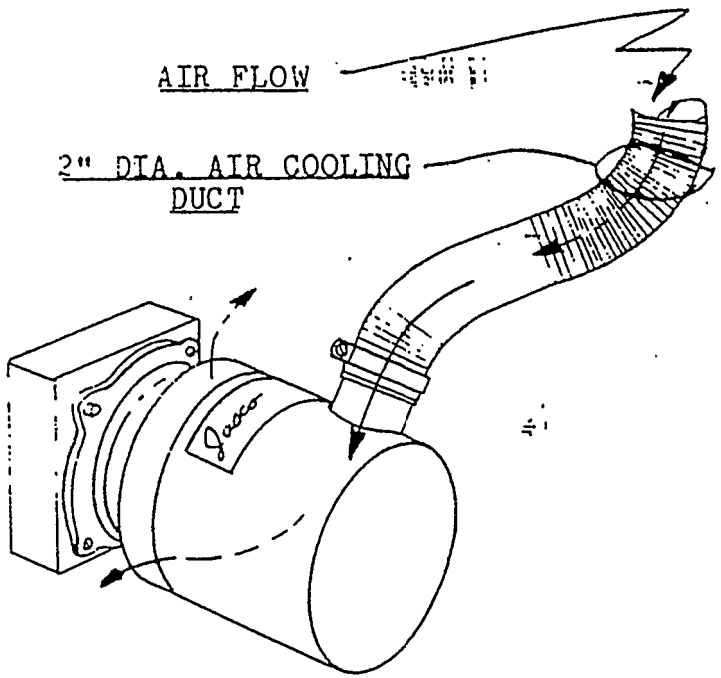
COUPLING SLEEVE, P/N 530407 (NOT SHOWN) IN GEAR DRIVE ASSEMBLY IS DELETED WHEN USING SKYTRONICS LARGE DIAMETER SHAFT



ITEM NO.	QTY	CONTINENTAL PART NO	DESCRIPTION
1	1	352029	HUB
2	1	352020	RETAINER
3	2	626543	BUSHING, RUBBER
4	1	530997	GEAR DRIVE
5	1	530412	NUT $^{5}/_{16}-24$
6	1	2501	COTTER PIN
7	1	352066	GASKET

INSTALLATION OF MODEL 6560T

Care must be taken on assembly that the rubber blocks are placed correctly in the retainer. The radii on the blocks are towards the bottom corner of the retainer and against the tongue of the gear. It is important that the nut be adequately tightened against the shoulder of the shaft. If the cotter key hole will not line up then shims must be placed behind the nut to accomplish this.



TYPICAL COOLING FOR JASCO ALTERNATOR

HELICOPTER APPLICATION

ROUTE AIR COOLING DUCT TO COOLING SHROUD: SUPPORT DUCT TO PREVENT OBSTRUCTION TO AIR FLOW.

FIXED WING APPLICATION

ROUTE RAM AIR COOLING DUCT TO RAM AIR COOLING INLET: SUPPORT DUCT TO PREVENT OBSTRUCTION TO AIR FLOW.

COOLING INLET SHOULD BE EXTERNAL TO AIRCRAFT ENGINE COMPARTMENT AIR. IT IS RECOMMENDED TO PROVIDE A SEPARATE AIR SCOOP INLET TO RAM AIR COOLING DUCT. (DO NOT CONNECT TO HEATER BOX.)

CAUTION

DO NOT OPERATE ALTERNATOR WITHOUT SUPPLYING ADEQUATE COOLING AIR TO THE ALTERNATOR. OPERATING ALTERNATOR WITHOUT ADEQUATE COOLING WILL DAMAGE ALTERNATOR. OPERATION OF ALTERNATOR WITHOUT ADEQUATE COOLING VOIDS WARRANTY.

SKYTRONICS, INC.
EL SEGUNDO, CALIF.

MATERIAL	DATE 12/22/78	DWN. BY HP
SPEC.	SCALE	APPR. BY JES
FINISH	DIMENSION TOLERANCE ± .005 UNLESS OTHERWISE SPECIFIED	

RECOMMENDED COOLING FOR JASCO ALTERNATOR INSTALLATION.

DWG. NO. 5016

LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M20SP	12-21-93	

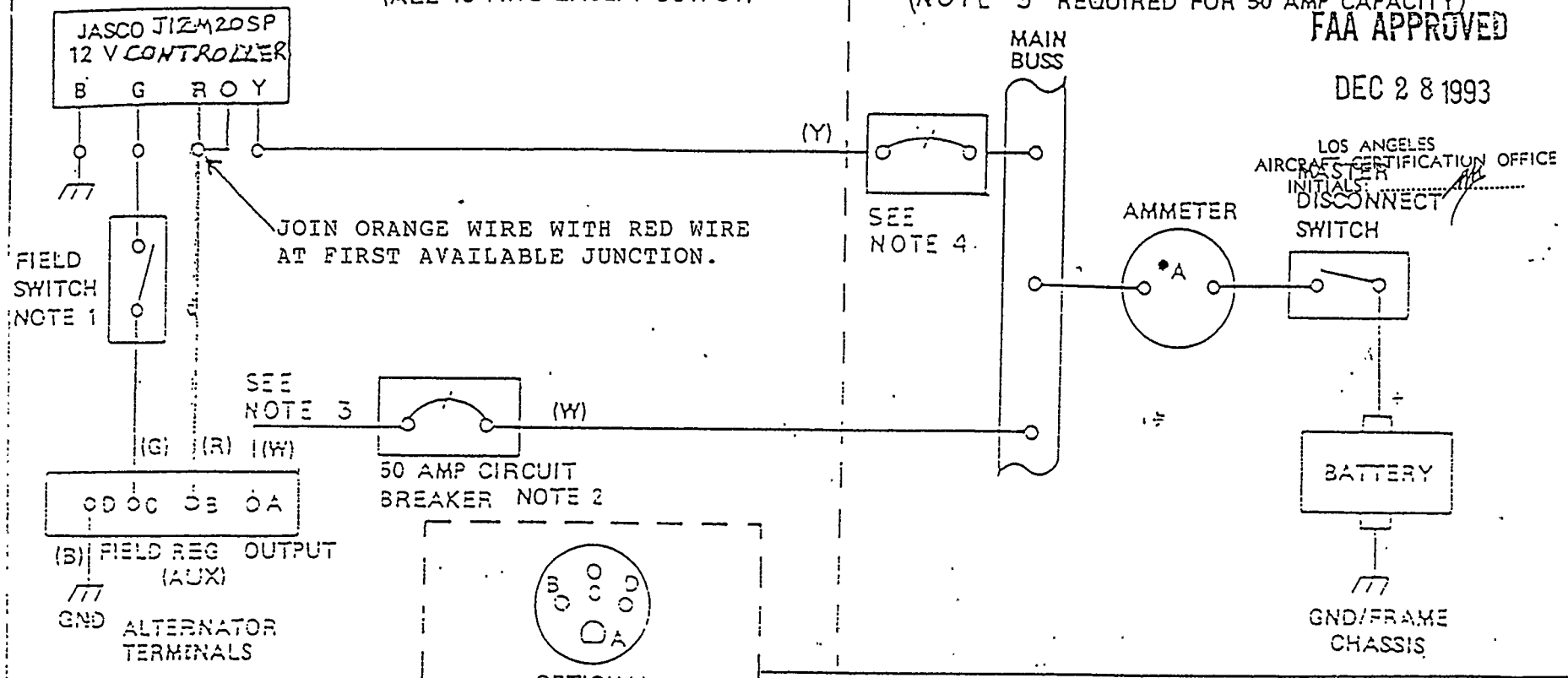
CIRCUIT REQUIRED FOR INSTALLATION
(ALL 18 AWG EXCEPT OUTPUT)

TYPICAL EXISTING CIRCUIT
(NOTE 3 REQUIRED FOR 50 AMP CAPACITY)

FAA APPROVED

DEC 2 8 1993

LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
MASTER INITIALS:



NOTES:

1. COMBINATION FIELD SW & 5 AMP CIRCUIT BREAKER NOT SUPPLIED. POTTER-BRUMFIELD P/N W31X2M16-5 RECOMMEDED.

KYTRONICS, INC.
EL SEGUNDO, CALIF

MATERIAL	DATE 12-21-93	DWN. BY C.P.
SPEC.	SCALE	APPR. BY
FINISH	DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED	

INSTALLATION WIRING FOR 12 V. 50 A. NEG GND ALTERNATOR

P1001

REVISIONS			
LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M20SP	12-21-93	

2. 50 AMP CIRCUIT BREAKER NOT SUPPLIED. POTTER-BRUMFIELD P/N W23X1A1G-50 RECOMMENDED.

3. FOR SINGLE WIRE ROUTING USE 8 AWG PER MIL-W-5086. FOR CONDUIT OR BUNDLE ROUTING USE 6 AWG, MIL-W-5086 OR EQUAL AIRCRAFT QUALITY WIRE.

4. IN COMPLIANCE WITH FAA REGULATIONS, REGULATOR CIRCUIT IS TO BE PROTECTED WITH CIRCUIT BREAKER OR FUSE LOCATED IN CLOSE PROXIMITY TO BUSS. FUSE OR BREAKER SIZE IN ACCORDANCE WITH THE FOLLOWING:

WIRE SIZE	CKT BKT	FUSE
22 GA	5 AMP	5 AMP
20 GA	7.5 AMP	5 AMP
18 GA	10 AMP	10 AMP
16 GA	15 AMP	10 AMP

CIRCUIT BREAKER OR FUSE ASSEMBLY NOT SUPPLIED.

5. NEW VOLTAGE REGULATOR P/N J12M20SP INCORPORATES THE VOLTAGE PROTECTOR SVP-3. THUS, THE J12M20SP SUPERCEEDS AND OBSOLETES BOTH THE J12M20 AND THE SVP-3 UNITS.

FAA APPROVED

DEC 2 8 1993

LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
INITIALS: .....

SKYTRONICS, INC.
EL SEGUNDO, CALIF

MATERIAL	DATE 12-21-93	DWN. BY C.P.
SPEC.	SCALE	APPR. BY
FINISH	DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED	

INSTALLATION WIRING FOR 12V. 50A. NEG GND ALTERNATOR

P1001 SHEET 2 of 2

PAGE 4 7/8/95 NGADX

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 1-26-82

SEP 14 1955

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR ANNUAL INSPECTION OF AN AIRCRAFT

Form Approved. Budget Bureau No. 41-R041.5.

INSTRUCTIONS
Please print or type. Submit this form to the Civil Aeronautics Administration Aviation Safety Field Representative.

1. TYPE OF APPLICATION (*Check which*)

a. ☐ ORIGINAL ISSUANCE OF CERTIFICATE
b. ☒ ANNUAL INSPECTION FOR RENEWAL OF CERTIFICATE
c. ☐ AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE
d. ☐ RECERTIFICATION UNDER THE PROVISIONS OF CAR 8
e. ☐ MULTIPLE CERTIFICATE UNDER THE PROVISIONS OF CAR 8
f. ☐

2. AIRWORTHINESS CLASSIFICATION (*Check appropriate item(s)*)

It is requested that the Certificate of Airworthiness be issued to permit operation of the aircraft in the following airworthiness classification(s):

a. ☒ STANDARD (NORMAL, UTILITY, ACROBATIC, TRANSPORT CATEGORIES)
b. ☐ LIMITED (SEE CAR 9)
c. ☐ RESTRICTED (SEE CAR 8)
(*Check the restricted special purpose operation(s) to be conducted*)
☐ AGRICULTURAL AND PEST CONTROL
☐ AERIAL ADVERTISING
☐ AERIAL SURVEYING
☐ GLIDER TOWING
☐ PATROLLING
☐ FOREST AND WILDLIFE CONSERVATION
☐ WEATHER CONTROL
☐ OTHER
d. ☐ EXPERIMENTAL
(*Check the type of experimental operation(s) to be conducted*)
☐ RESEARCH AND DEVELOPMENT
☐ AMATEUR-BUILT
☐ DEMONSTRATION
☐ RACING
☐ EXHIBITION
☐ OTHER

3. AIRCRAFT IDENTIFICATION (*Complete all items*)

a. AIRCRAFT MAKE	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
Taylorcraft	BC12-D	8727

d. ENGINE MAKE	e. ENGINE MODEL
Continental	A65-8

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
William Munford	28 Peacock road, Park Ridge, N.J.	N- 96427

5. AIRCRAFT OWNER'S CERTIFICATION (*Check and complete appropriate item*)

I hereby certify that I am the registered owner (or his agent) of the aircraft identified in Item 3 above which is registered* with the Civil Aeronautics Administration as required by the Regulations of the Administrator, Part 501 or 502 and when operated displays the following evidence of registration:

a. ☒ CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A), DATE OF ISSUE July 1, 1954
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (DATE)
c. ☐ DEALER'S REGISTRATION CERTIFICATE, FORM ACA-1707, DATED _____

*In order to be eligible for registration an aircraft must be owned by a citizen of the United States, as defined by Section 1 (13) of the Civil Aeronautics Act of 1938, as amended.

ATTACHMENTS (*Check which*)
☒ ACA-319
☐ ACA-337
☐ ACA-317
☐ WEIGHT AND BALANCE REPORT
☐ DATA, DRAWINGS, ETC.
☐ UNAPPROVED DEVIATION DATA

William N. Munford
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

August 24, 1955 (DATE) Owner (TITLE)

16—60877-2

36 OCT 10 1963

Form ACA-305 (11-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 1-26-82

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

(To be completed by a CAA representative or approved repair station)

The aircraft described in Item 3 on the reverse of this form has been inspected and found to conform to the following:
(Check and complete applicable items)

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS

a. ☒ AIRCRAFT SPECIFICATION NO. 696 THROUGH SHEET REVISION NO. 12
b. ☐ AIRCRAFT LISTING PAGE NO. _____
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1955 (YEAR) THROUGH CARD NO. 17
d. ☐ CIVIL AIR REGULATION PART 8 (MODIFIED TYPE CERTIFICATE)

2. AIRCRAFT AND ENGINE OPERATING RECORDS

a. ☐ AIRCRAFT NEW—NO PREVIOUS OPERATION OR MAINTENANCE HISTORY
b. ☒ COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
c. ☒ AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 1487:15 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
SERIAL NO. 3804468 TOTAL HOURS 1487:15
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)

a. LAST AIRWORTHINESS INSPECTION CONDUCTED August 4, 1955 (DATE)
☐ BY AIRCRAFT MANUFACTURER
☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
☒ BY MECHANIC, CERTIFICATE NO. 542614 A&E
b. ☐ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED
NOV 14 2 55 PM '55
ADMIN. RECORDS BRANCH
M-569

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
b. ☒ CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
c. ☐ CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
d. ☐ CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
e. ☒ THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
f. ☒ CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE August 24, 1956 (DATE)
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE August 20, 1955 (DATE)
BY George A. Stedman (NAME OF ISSUING REPRESENTATIVE) 3440 (DESIGNATION NO.)

5. CAA APPROVED REPAIR STATION CERTIFICATION

The aircraft described on the reverse has been inspected under the authority accorded certificated repair station No. _____ by CAR 52 and was found to be:

☐ AIRWORTHY
☐ UNAIRWORTHY

_____ (REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

I HAVE INSPECTED THE AIRCRAFT DESCRIBED ON THE REVERSE AND FOUND IT ☒ AIRWORTHY ☐ UNAIRWORTHY (Check appropriate item)

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE
George A. Stedman	3440	8/24/55
AVIATION SAFETY AGENT'S SIGNATURE	**CAA DESIGNATION NO.**	**DATE**
N. J. Serai	NY-257-18	9-15-55

☒ ACCEPTED ☐ REINSPECTED ☐ SPOT CHECKED

☐ ATTACHMENT

Reg. 1 NY
ASDO 18

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

Form ACA-305a (11-51)