



US 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 *DF*

50FS0017

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 REPUBLIC	Model RC-3
	Serial No. 946	Nationality and Registration Mark N565CB
2. Owner	Name (As shown on registration certificate) HENRY RUZAKOWSKI	Address (As shown on registration certificate) P.O. BOX 497 TAVERNIER, FLORIDA 33070

3. For FAA Use Only

The data/alteration identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

Date: *7-17-97* Signature: *Bruce Hill* Inspector No: *5017*

4. Unit Identification

Unit	Make	Model	Serial No.	Type of Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address HENRY RUZAKOWSKI P.O. BOX 497 TAVERNIER, FLORIDA 33070	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. A&P267490854
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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 <i>7/17/97</i>	Signature of Authorized Individual <i>[Signature]</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 Ft. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	<input type="checkbox"/>	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection <i>7/17/97</i>	Certificate or Designation No. <i>A&P267490854/A</i>	Signature of Authorized Individual <i>[Signature]</i>
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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 SKYTRONICS ALTERNATOR

Skytronics alternator system is installed on a Republic RC-3 Seabee, N565CB, S/N 946.

Removed the existing generator and replaced it with a Jasco Skytronics gear driven Alternator. Engine is a Lycoming GO-480-B1A6 with a 6 stud, 16 spline, AN20002 flange mount. Skytronics, Inc. Model 6565T-1 is a 12-volt, 50-amp alternator, that is a direct bolt-on replacement for the generator onto the existing engine. See attached Application Sheet.

The alternator comes as a complete assembly with a voltage controller and wiring diagrams. Installation of the alternator and wiring are as per Skytronics wiring diagram P1001, Sheets 1 and 2, see attached. This identifies the wire sizes and circuit protection required to complete the installation.

This installation is identical to the STC'ed version on the Helio H-295, STC SA987SO. This installation is also identical to that of a previously approved Republic RC-3 Seabee, N6144K, S/N 330 on 9/16/93.

An electrical load analysis was accomplished and found that aircraft load does not exceed 80% of alternator output as per FAR Part 23.135.

Make and model of alternator has been recorded in aircraft Equipment List. Alternator was installed on the engine prior to aircraft being weighed.

END

Additional Sheets Are Attached

JASCO ALTERNATOR



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

Form Approved
OMB No. 2120-0020
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. 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 Republic	Model RC-3
	Serial No. 330	Nationality and Registration Mark N6144K
2. Owner	Name (As shown on registration certificate) Donald V Kyte	Address (As shown on registration certificate) 216 146th ST SW Lynnwood, WA. 98037-6714

~~The alteration or repair 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 Part 43, Section 43.7.~~

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				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address Barry Mortensen 8621 Gail Ave Juneau, AK. 99801	B. Kind of Agency	C. Certificate No. 550413529
	<input checked="" type="checkbox"/> U.S. Certificated Mechanic	
	<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 09/15/93	Signature of Authorized Individual
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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 Fit. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection 9/16/93	Certificate or Designation No. 550413529	Signature of Authorized Individual
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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 Jasco Alternator Kit #6565-1 in accordance with manufacturers instructions and AC 43.13-1A Change 3, Chapter 11, Section 2, Para. 427. Installation is similar to STC SA987S0 for Lycoming G0-480 powered Helio-Courier. This installation was previously approved on two previous identical aircraft (see attached). Original output wire was replaced with a #6 AWG wire in accordance with AC43.13. Weight and balance change negligible. Operational test conducted satisfactory.

=====END=====

The alteration or repair 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 Part 43, Section 43.13.

AAI-FSDO-02

dated

Additional Sheets Are Attached



SKYTRONICS

INCORPORATED

JASCO ALTERNATORS
50 AMP
GEAR DRIVEN PAD-MOUNTS

APPLICATION	RETROFIT KIT	KIT CONTENT
CONTINENTAL RADIAL W670 BELL 47 HELICOPTER (TRANS MOUNT) JACOBS: R755, LM4, L6MB RANGER: L440 SERIES P&W : R985, R1340 WARNER: 165, 188 WRIGHT: R1820-53	SQUARE PAD 6 SPLINE 6555T-1 12 volt 50 AMP	6555T ALTERNATOR ASSY J12M20SP CONTROLLER WIRING DIAGRAMS
	7555T-1 24 volt 50 AMP	7555T ALTERNATOR ASSY J12M24SP CONTROLLER WIRING DIAGRAMS
CONTINENTAL: R975 CONTINENTAL: 0-470-15 LYCOMING: R680-9-13 RADIAL LYCOMING OPPOSED ENGINES: O435-11, G0435C2, G1D6 G0480, G0480-B1D OTHER LYCOMING ENGINES: AND AN2002 GENERATOR DRIVE PAD (6 OR 16 SPLINE)	6 STUD 16 SPLINE (AN20002) 6565T-1 12VOLT 50 AMP	6565T ALTERNATOR ASSY J12M20SP CONTROLLER WIRING DIAGRAMS
	7565T-1 24 VOLT 50 AMP	7565T ALTERNATOR ASSY J12M24SP CONTROLLER WIRING DIAGRAMS
CONTINENTAL ENGINES: C85-12, C75-12 O200, O300, G0300, C145, E185, E225	ROUND PAD SIMILAR TO - DELCO GENERATOR - 6560T-1 12 VOLT 50 AMP	6560T J12M20SP WIRING DIAGRAMS

* OPTIONAL 90° ELBOW CONNECTOR MS3108E20-20S AVAILABLE
SPECIFY SUFFIX "C" IN LIEU "T"

** NOTE ALL REGULATORS WITH "P" IN THE PART NUMBER VOLTAGE SPIKE PROTECTOR IS
BUILT INTO THE UNIT

*** STC'S ARE APPLICABLE TO CERTAIN AIRCRAFT/ENGINE UNITS. SEE STC LISTING
ALL OTHER INSTALLATIONS MAY BE ACCOMPLISHED ON FAA FORM 337.

PRODUCTION APPROVAL LISTING - SUPPLEMENT NO. 8

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Skytronics, Inc.

<u>Part Name and Number</u>	<u>Design Data and Approval Means</u>	<u>Eligible for Installation on</u>
Jasco Alternator P/N 7555H-72B and Voltage Regulator P/N J12M24SPH	T.C. 41111 and Hiller licensing agreement letter dated February 6, 1979, & June 25, 1979	Hiller UH-12E and UH12E-L
Jasco Alternator Kit P/N 6565-1	STC SA987S0 and Jungle . Aviation and Radio Service, Inc. licensing agreement letter dated February 13, 1979	Helio H-295, H-391, and H-395
Jasco Alternator P/N 6555-1, Regulator P/N J12M20 (12-Volt), and/or Alternator P/N 7555-1, Regulator P/N J12M24 (24-Volt)	STC SA2279SW and Page Industries, Inc. licensing agreement letter dated January 15, 1979	Cessna A188, A188A, and A188B
Jasco Alternator P/N 7555-1, Voltage Regulator P/N J12M24, Voltage Protector P/N SVP-4	STC S112303SW and Continental Copters, Inc. licensing agreement letter dated December 1, 1978	Continental Copter (Bell) OH-13H/ Tomcat Mark 5A



RALPH U. HARE
Acting Chief, Manufacturing Inspection Branch

July 12, 1979

Since the alternator made its first appearance in the early 1960s Skytronics has been working to provide fixed- and rotary-wing general aircraft with the most efficient charging systems available.

JASCO Alternator systems are designed for factory installations, as replacements for generators and to upgrade amperage to meet the higher power requirements of electronic accessories, added avionics, special illumination and equipment for emergency and commercial operators.

Compared to the best generator available, the JASCO alternator is lighter, smaller, more reliable, delivers more power and requires less maintenance, less overhaul and fewer parts.

Compact and Light Weight

Total weight of the 50-, 70- and 100-amp JASCO alternator is approximately 10 to 12 pounds—a savings of up to 25 pounds when replacing a conventional generator system. The JASCO alternator measures

only six or seven inches in length and 5.35 inches in diameter, approximately 25% smaller than competitive models. Such weight and size reductions save fuel and make maintenance easier.

The primary advantage of JASCO alternators is that they are more dependable and last longer than generators and many types of alternators for reasons inherent in their design.

Brush current in an alternator is 1/10 that of a generator, resulting in higher reliability and at least four times longer brush life. The smaller alternator armature presents less dynamic bearing load, causing them to last longer.

The smaller rotor allows it to run approximately 20% faster than a generator rotor, giving considerably more output at higher speeds. Alternator output is also higher at low RPM, which is important at engine idle speeds when the alternator will supply current to the battery while the generator would allow battery

drainage. As a result, alternators help increase battery life.

Output connections on the alternator are stationary with no moving parts to wear. Generator high-current connections are through the commutator, making them another moving part to wear out.

Rugged Construction

The JASCO alternator is fitted with pre-lubricated ball bearings at both primary and secondary drive shafts and has a weather-proof housing that enables the system to operate in above-normal heat and renders the unit resistant to water, salt spray, hail, dirt, oil, DC-4 compounds and other common chemicals.

Separate Solid-State Controllers

Both JASCO 12-volt and 24-volt alternator systems come complete with a controller that combines a voltage regulator and voltage protector that cuts off spurious voltage spikes that could damage avionics equipment. (The alternator also is available separately.)

Mounted in a rugged cast aluminum housing, the controller can be mounted in an optimum environment away from heat sources and in a location easily accessible for testing and trouble-shooting.

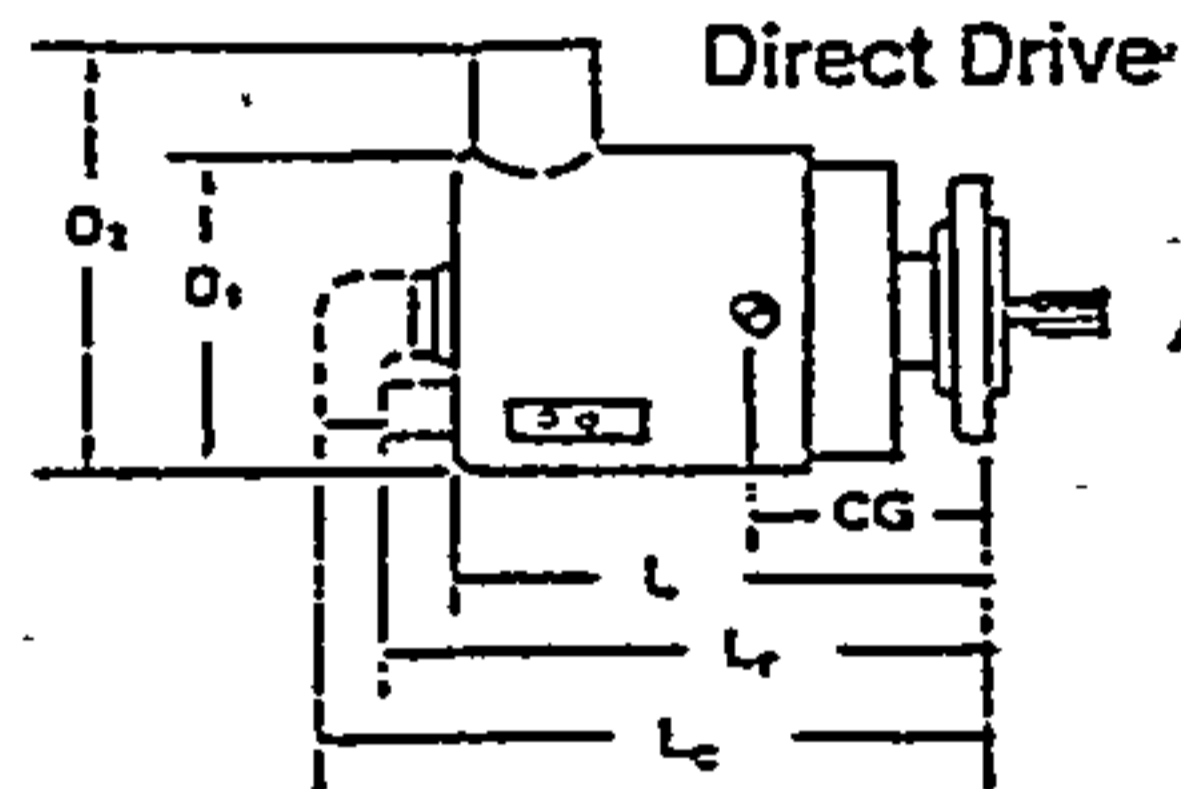
No Relays

The JASCO alternator system uses rectification diodes instead of bulky, less reliable electro-mechanical relays to rectify three-phase alternating current to direct current. This method, along with the alternator design, eliminates the requirement of reverse current relays and other relays found in generator power systems.

How to pick the alternator for your aircraft:
From the data in color below pick the voltage, mounting flange and drive type required and the amperage output you need. Then choose a type of electrical connector desired.

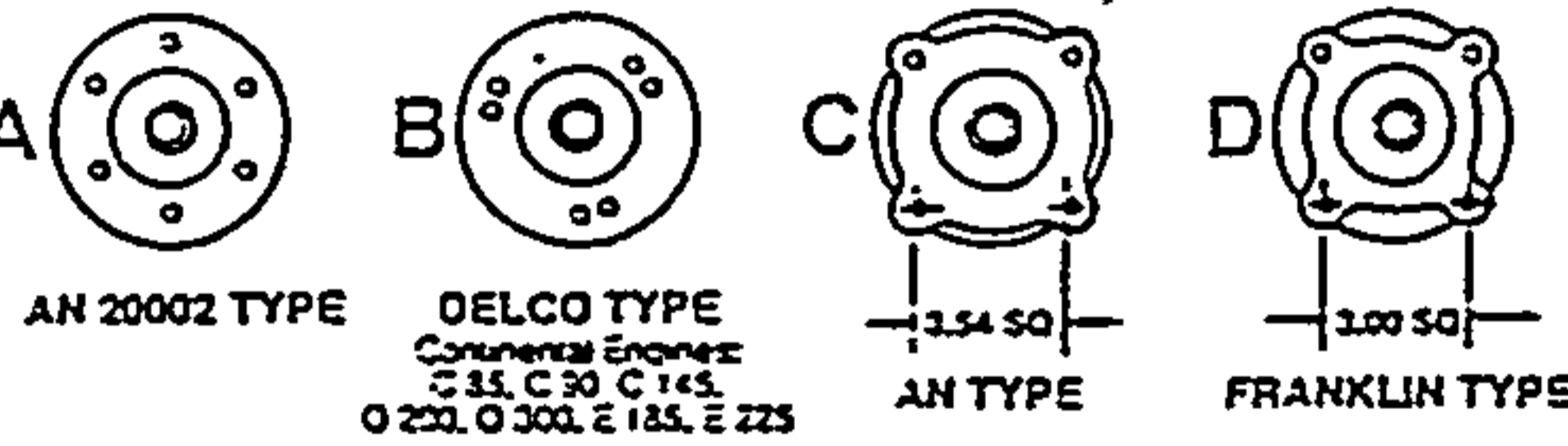
Connector Types:

- C = 90° MS 3108E20-20S connector.
- T = Rear-mounted terminal strip.
- TS = Side-mounted terminal strip.

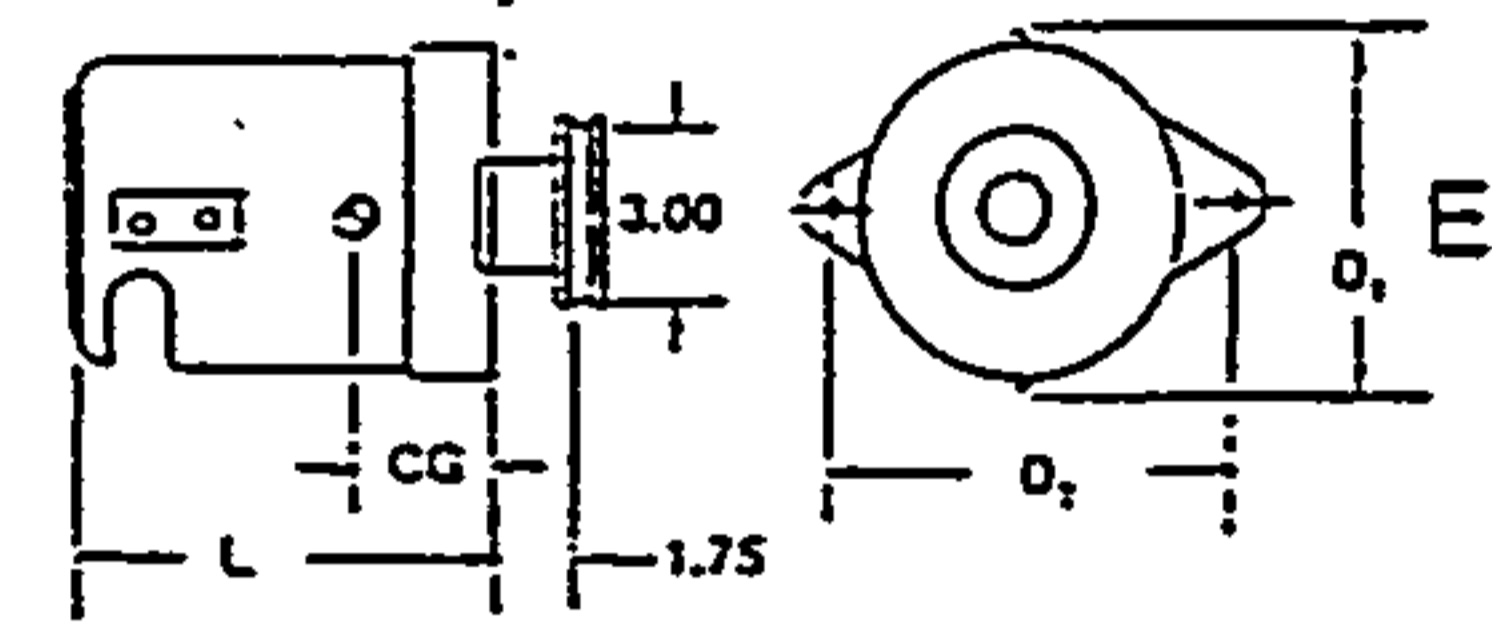


FLANGE MOUNTING STYLE

(All units are 0-100 RPM rotation)



Pulley Drive



GENERAL SPECIFICATIONS

MODEL NUMBER	RATED CURRENT AMPS	VOLTAGE VDC	MTG FLANGE STYLE	DRIVE TYPE	WEIGHT LBS	CG INCHES
5550	50	12	E	PULLEY	10.00	1.75
5555	50	12	C	5 SPLINE	10.25	3.25
6555TL	50	12	C	FOR LIT. 0435-1 ENGINE	10.25	3.25
6560	50	12	B	CONTINENTAL GEAR DRIVE	10.25	3.25
6565	50	12	A	16 SPLINE	10.25	3.25
6575	50	12	D	FRANKLIN GEAR DRIVE	10.25	3.25
7550	70	12	E	PULLEY	11.00	1.90
8555	70	12	C	6 SPLINE	12.50	3.25
8150	100	12	E	PULLEY	12.75	1.75
8155	100	12	C	6 SPLINE	12.75	3.50
8165	100	12	A	16 SPLINE	12.75	3.50
7550	50	24	E	PULLEY	10.00	1.75
7555	50	24	C	6 SPLINE	10.25	3.25
7565	50	24	A	16 SPLINE	10.25	3.25
7650	70	24	E	PULLEY	11.00	1.90
7655	70	24	C	6 SPLINE	12.50	3.25
7665	70	24	A	16 SPLINE	12.50	3.25
7150	100	24	E	PULLEY	12.75	1.75
7155	100	24	C	6 SPLINE	12.75	3.50
7165	100	24	A	16 SPLINE	12.75	3.50

OVER-HANGING MOMENT IN—LBS	TORQUE		OUTLINE DIMENSIONS—INCH				
	STATIC FT/LBS	DYNAMIC FT/LBS MAX. RATED OUTPUT	L Overall length with side terminal strip	L1 Overall length with rear terminal strip	L2 Overall length with "C" connector	O1 Diameter	O2 Diameter at 1000 RPM
17.50	5.00	2.16	6.00	NA	NA	5.35	6.75
33.30	5.00	2.16	7.31	3.70	10.63	5.35	7.16
33.30	5.00	2.16	7.13	3.50	10.63	5.25	6.75
33.30	5.00	2.16	7.13	3.50	10.63	5.25	6.75
33.30	5.00	2.16	7.31	3.70	10.63	5.35	7.16
33.30	5.00	2.16	7.13	3.50	10.63	5.25	6.75
20.90	5.00	2.69	6.00	NA	NA	5.35	6.75
40.60	5.00	2.69	7.37	3.75	10.63	5.35	7.16
22.30	5.00	2.90	6.00	NA	NA	5.35	6.75
44.63	5.00	2.90	7.37	8.75	10.63	5.35	6.50
44.63	5.00	2.90	7.37	8.75	10.63	5.35	6.50
17.50	5.00	3.84	6.00	NA	NA	5.35	6.75
33.30	5.00	3.84	7.31	8.70	10.63	5.35	7.16
33.30	5.00	3.84	7.31	3.70	10.63	5.35	7.16
20.90	5.00	4.84	6.00	NA	NA	5.35	6.75
40.60	5.00	4.80	7.37	3.75	10.63	5.35	7.16
40.60	5.00	4.80	7.37	8.75	10.63	5.35	7.16
22.30	5.00	5.32	6.00	NA	NA	5.35	6.75
44.63	5.00	5.32	7.37	8.75	10.63	5.35	6.50
44.63	5.00	5.32	7.37	8.75	10.63	5.35	6.50

REVISIONS

LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M20SP	12-21-93	<i>[Signature]</i>

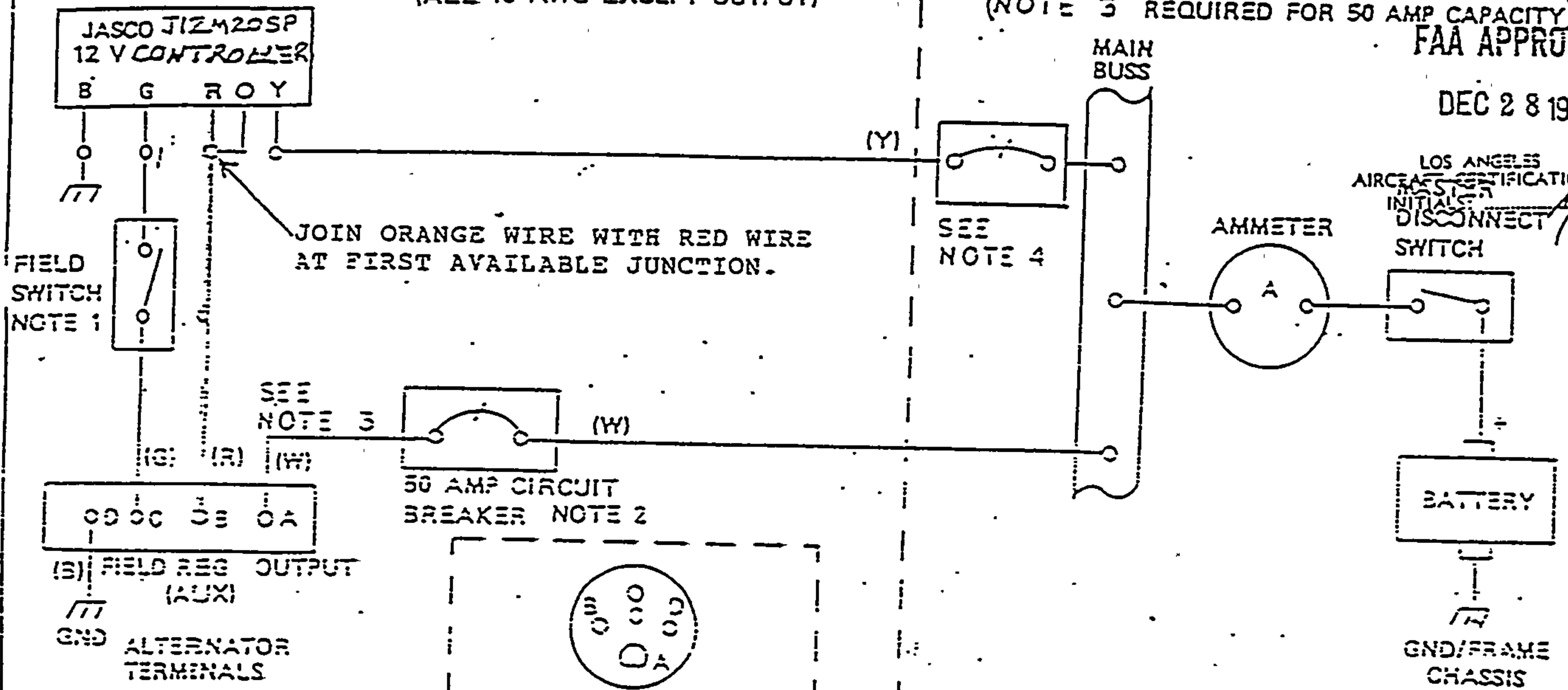
(NOTE 3 REQUIRED FOR 50 AMP CAPACITY)

FAA APPROVED

DEC 28 1993

LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
 INITIALS: *[Signature]*
 DISCONNECT SWITCH

CIRCUIT REQUIRED FOR INSTALLATION
 (ALL 18 AWG EXCEPT OUTPUT)



JOIN ORANGE WIRE WITH RED WIRE AT FIRST AVAILABLE JUNCTION.

SEE NOTE 4

SEE NOTE 3

50 AMP CIRCUIT BREAKER NOTE 2

OPTIONAL ALTERNATOR CONNECTOR

(B) FIELD REG OUTPUT (AUX)
 GND

ALTERNATOR TERMINALS

B=BLACK
 G=GREEN
 R=RED
 W=WHITE
 Y=YELLOW

NOTES:

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

SKYTRONICS, INC.

EL SEGUNDO, CALIF

MATERIAL	DATE 12-21-93	OWN. BY
SPEC.	SCALE	APPR. BY <i>[Signature]</i>
FINISH	DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED	

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

P1001

SHEET 1 of 2

REVISIONS			
LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M2OSP	12-21-93	

DATE	APPROVED
11-1-79	
12-10-79	

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


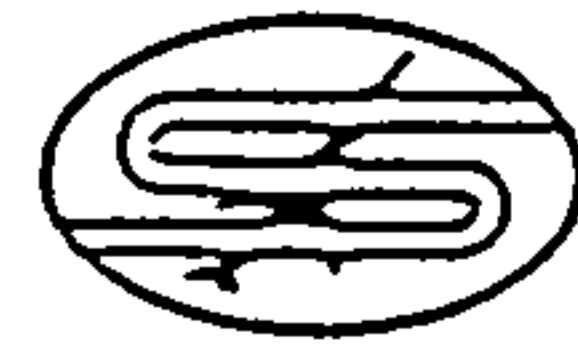
FOR SINGLE WIRE ROUTING USE 8 AWG PER
 MIL-W-5086. FOR CONDUIT OR BUNDLE
 ROUTING USE 6 AWG, MIL-W-5086 OR EQUAL
 AIRCRAFT QUALITY WIRE.

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

WIRE SIZE	CKT BKT	FUSE
2 GA	5 AMP	5 AMP
3 GA	7.5 AMP	5 AMP
5 GA	10 AMP	10 AMP
6 GA	15 AMP	10 AMP

CIRCUIT BREAKER OR FUSE ASSEMBLY NOT SUPPLIED.

NEW VOLTAGE REGULATOR P/N J12M2OSP
 INCORPORATES THE VOLTAGE PROTECTOR
 VP-3. THUS, THE J12M2OSP SUPER-
 SEDES AND OBSOLETEES BOTH
 THE J12M20 AND THE SVP-3 UNITS.

 SKYTRONICS, INC.			
EL SEGUNDO, CALIF			
MATERIAL	DATE 12-21-93	OWN. 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	

5 TO BE USED
 VOLTAGE
 THE VOLTAGE
 CONTAINS A
 VOLTAGE
 VOLTAGE CONTROLLER
 VOLTAGE
 VOLTAGE

11	DWN BY:
1001	APPR BY:
ALTERNATOR	
5024	

FAA APPROVED

DEC 28 1993

LOS ANGELES
 CRAFT CERTIFICATION OFFICE
 INITIALS: _____