FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 3-21-86

789

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SW-GADO

APR 26 1984

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION
SW-GADO-7

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: REPUBLIC	MODEL: RC-3
	SERIAL NO.: 765	NATIONALITY AND REGISTRATION MARK: N6499K
2. OWNER	NAME *(As shown on registration certificate)*: Edmond F. Freeman	ADDRESS *(As shown on registration certificate)*: Greg Terrace Apt Johnson City, TN

3. FOR FAA USE ONLY

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

4-24-84 (Date)

Anthony D. Wells (Signature of FAA Inspector, SW-GADO-7, Lubbock, Texas)

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE REPAIR	5. TYPE ALTERATION
AIRFRAME	••••••••••••••••••••• *(As described in item 1 above)* •••••••••••••••••••••				
POWERPLANT	AVCO-LYCOMING	GO-480-G2D6	L-197-34		X
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Edmond F. Freeman 342 Westridge Ave Abilene, Tx 79605	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	1580607

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: 4-16-84

SIGNATURE OF AUTHORIZED INDIVIDUAL: Edmond F. Freeman

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	X	INSPECTION AUTHORIZATION	OTHER *(Specify)*
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
4-24-84	1580607	Edmond F. Freeman

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 3-21-86

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.)*

FUEL INJECTION SYSTEM

(1). Contacted Avco Lycoming to obtain information regarding this conversion from a pressure carburetor to Bendix Fuel Injection. Information received may be found in attachment #1.

(2). Type certificate data sheet No. E-275-10, page 7 and 8 indicates that this fuel injection system is utilized on the IGO-480-A1A6/A1B6 engines. Review of this T.C.D.S. also indicates, in note 4 that the only difference between the IGO-480-A1A6/A1B6 and the GO-480-G2D6 engine other than the fuel injection system is that the -G2D6 engine incorporates a flanged propeller shaft and a different magnetoe. This modification to a fuel injection system will be accomplished using information provided by Avco Lycoming to convert to the system on the IGO-480-A1A6/A1B6 engine.

(3). Removed fuel pump, priming system and PS-5 pressure carburator.

(4). Installed engine driven fuel pump lear siegler P/N 17980-N.

(5). Installed AN932-2 plugs in primer nozzle holes.

(6). Using Lycoming special tool, drilled and heli-coiled holes in each cylinder head in accordance with sketch provided by Avco Lycoming, see attachment #1.

(7). Installed P/N 74151 nozzle in each cylinder.

(8). P/N LW-11789 bracket no longer available, so manufactured bracket to attach P/N LW-2524232-2 manifold assembly to top of engine case.

(9). Installed six P/N LW-12098 lines of sufficient length between manifold and nozzles and secured with MS21919 clamps to push rod tubes.

(10). Installed RSA-5AD1 injector servo basic P/N 252469-A.

(11). Installed a aeroquip 303-4 hose with 451-4 fittings between servo outlet and manifold assembly.

(12). Installed a aeroquip 303-6 hose with 451-6 and 980005-6 fittings between fuel pump and servo, properly supported with MS21919 clamps.

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/290

FAA FORM 337, DATED: April 16, 1984

Cont...,

FUEL INJECTION SYSTEM

(13). The part numbers referenced are indicated on the parts list for the IGO-480-A1A6/A1B6 engine provided by Avco Lycoming, see attachment #1.

(14). All work performed in accordance with the instructions provided by Avco Lycoming, using drawings and sketches referenced herein, also all component installations completed using standard aircraft hardware and maintenance practices.

(15). Final system adjustment shall be accomplished following engine to airframe installation.

(16). Final selection of servo control arms shall be made following engine installation in order that they match the engine control system.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX END XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 3-21-96

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 3-21-86

RC-3, N6499K, FAA FORM DATED 4-16-84 PAGE 1 OF 2
ATTACHMENT #1

LYCOMING DIVISION
WILLIAMSPORT, PA.

EFFECTIVE PARTS LIST CO-480

PAGES, PAGE 45

MAJOR ITEM ASSEMBLY PARTS LIST

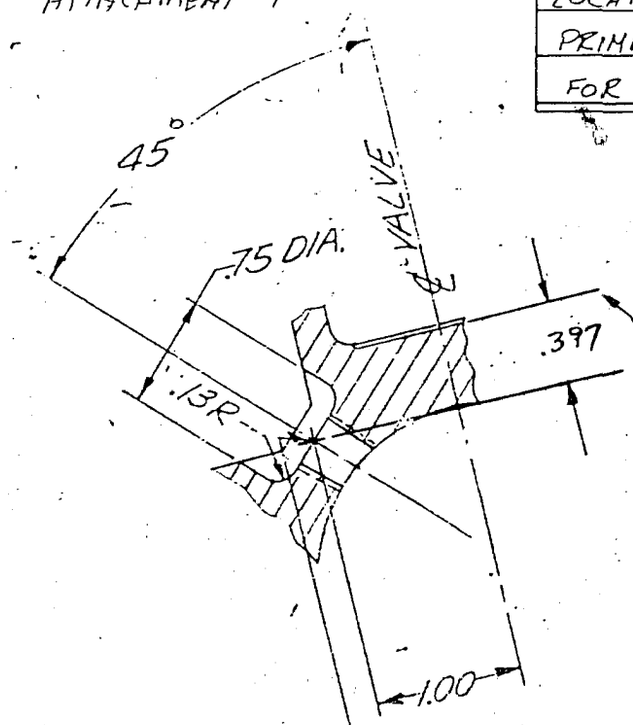
ASSEMBLY UNIT LYCOMING ICO-480-A1B6

PART NUMBER	SIZE	1	2	3	4	5	PART NAME	N RE
66224			Gasket-Fuel Injector					
LW-11792			Fuel Injector (2524634-1)					
STD-35			Washer-.3125 Plain				F,E,D	
STD-37			Nut-.3125-24 Plain					
STD-36			Locknut-.3125 Palnut					
74151			Nozzle-Injection					
LW-11790			Manifold Assembly-Fuel					
LW-2524232-2			Manifold-Fuel				G,B	
AN 791-2			Elbow-.250 Flared Tube-45°				,A	
AN780-2			Nipple-Union-.125 NPT				,A	4
9822-4 ~~9822-4~~			Elbow-.250 Flared Tube & .125 NPT-90°				C	
LW-12604			Nipple-.125 Tube to .125 NPT (Restricted)					
LW-11789			Bracket-Fuel Manifold					
STD-160			Washer-.250 Lock-Internal Teeth					
LW-25-.50			Bolt-.250-20 x .50 Long-Hex. Head				,H	
STD-251			Washer-No. 10 Lock-Internal Teeth					
STD-82			Screw-No. 10-24 x .50 Lg. Fill. Head-Drilled					
STD-1823			Lockwire-.032 Dia.					
LW12533			RG-17980N, Pump-Fuel					

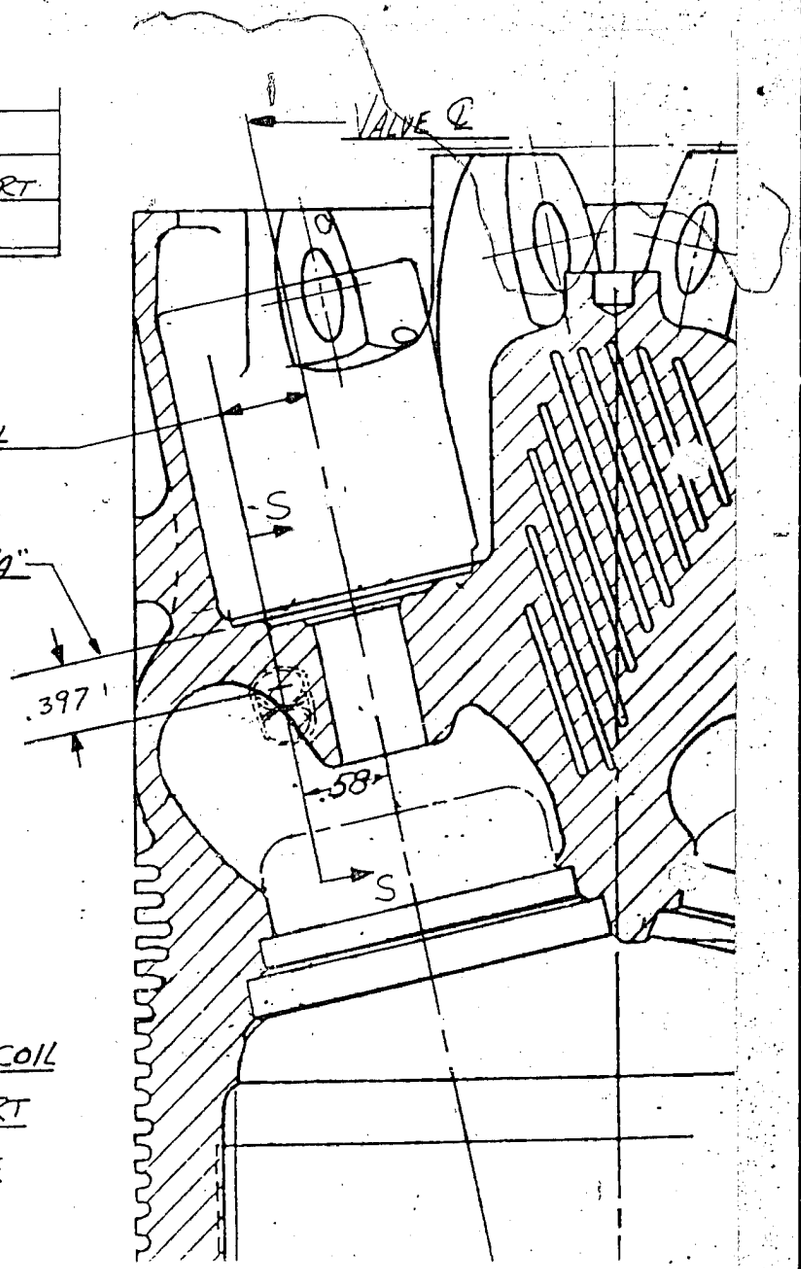
RC-3, N6499K, FAA FORM 337, DATED 4-16-84

ATTACHMENT #1

JKE IH
LOCATION OF
PRIMER NOZZLE PORT
FOR IGO-480



SECTION S-S



DRILL .366-.373 THRU

TAP .125-27 HELI-COIL THD FOR NPT

INSTALL STD-1872 HELI-COIL

TOP OF ASSEMBLED INSERT .010 - .020 BELOW SURFACE OF BOSS

PAGE 2 OF 2

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 3-21-86