



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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification **FAI FSDO 5-0-01**

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. 477	Nationality and Registration Mark N6267K
2. Owner	Name (As shown on registration certificate) Cy Heatherington	Address (As shown on registration certificate) Manley Hot Springs, AK 99756

3. For FAA Use Only

The data 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 43, section 43.7.

9-27-96 *John R. Greeff*
Date Signature of FAA Inspector AAL-FSDO-01

Unit	Make	Model	Serial No.	5. Type	
				Repair	Alteration
AIRFRAME	~~~~~ (As described in Item 1 above) ~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address John R. Greeff P.O. Box 862 Yelm, WA 98597	B. Kind of Agency	C. Certificate No. A&P #1449887
	<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 12-19-95	Signature of Authorized Individual <i>John R. Greeff</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 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 10-28-96	Certificate or Designation No. 55986-5551	Signature of Authorized Individual <i>Joseph L. Hoskins</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.)

Modified aircraft rudder trim by removing original rudder trim and installing a hinged tab assembly made of 2024T-3 .060" aluminum. Rudder was unriveted and old tab removed and new tab and hinge assembly bolted in place using AN526-832-6 screws and AN365-832 nuts.

A Menzimer Aircraft Components, Inc. servo unit, P/N MACS4 Servo, Rocker Switch and -position Indicator were installed. The servo unit was bolted inside the rudder assembly by use of four (4) AN526-832-8 screws and four (4) AN365-832 nuts (see attached photos). A MACS4 Servo Pushrod Kit was used to connect the servo to tab pylon. The operational range of the tab is 20° right and 35° left of neutral, which provides adequate yaw imbalance while not exceeding a reasonable corrective central pressure in the event of a full deflection runaway trim condition.

All work was performed per installation instructions and AC43.13-1A/1B, Change 3, revised 1988, Chapter 2, Section 1, Paragraphs 55(a), (b), (c) and (e); Chapter 5, Section 1, Paragraphs 228, 230, 232 and 233; Chapter 6, Paragraph 249; Chapter 11, Section 1, Paragraph 410, Section 2, Paragraphs 424, 426 and 428-430, Section 3, Paragraphs 442-445 and 448-451, Section 4, and Section 7, Paragraphs 514-519; Chapter 13, Paragraphs 659 and 662.

Weight and Balance was amended to reflect the above changes.

-- Nothing Follows --

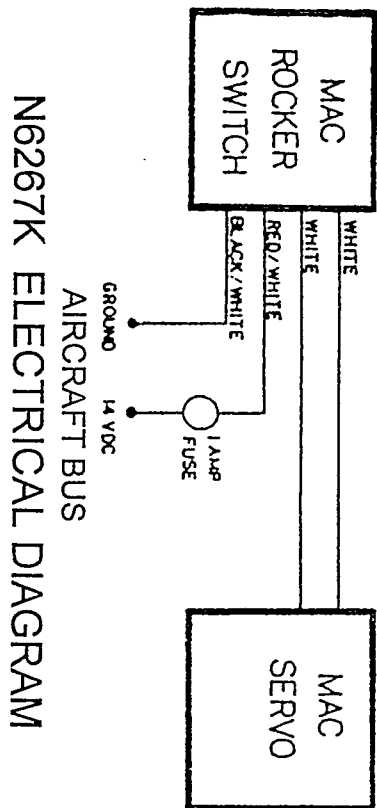
Additional Sheets Are Attached

RUDDER TRIM INSTALLATION N6267K

Installation of the Rudder Trim complies with CAA Part 03-0 dated 1-19-1945 Republic E17-4 dated 3-6-1946 titled Vertical Stress Analysis also Static Test #ERT516 Revision "A" dated 4-29-1946 which shows a 300% safety factor. Aerodynamic balance has not changed by the installation of Rudder Trim modification. Mass balance was not done nor needed by Republic. Hence N/A in this installation. Original tab was fixed, but bendable 90° either side of neutral with no limitations in the flight manual or maintenance manual.

LOCATED ON TRIM PEDISTAL

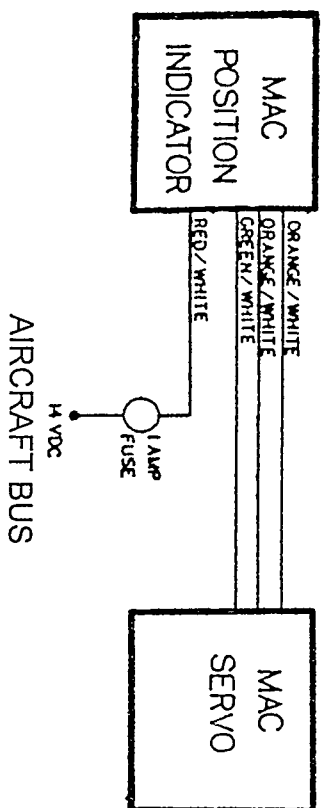
FIG. 1



N6267K ELECTRICAL DIAGRAM

LOCATED ON TRIM PEDISTAL

FIG. 2



N6267K ELECTRICAL DIAGRAM

FIG. 3

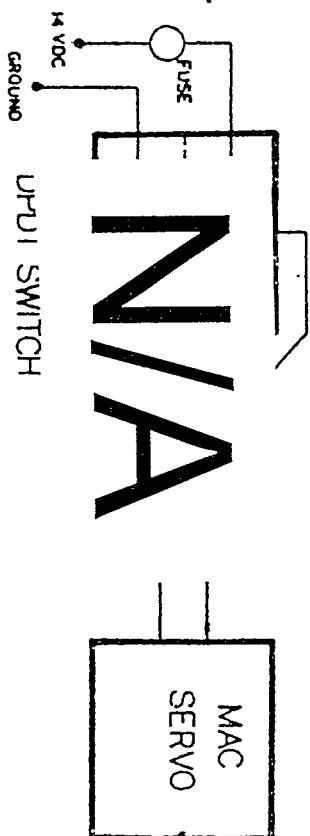
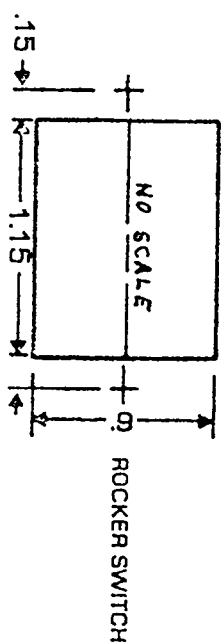


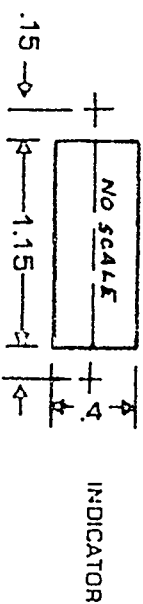
FIG. 4



PANEL CUT-OUT



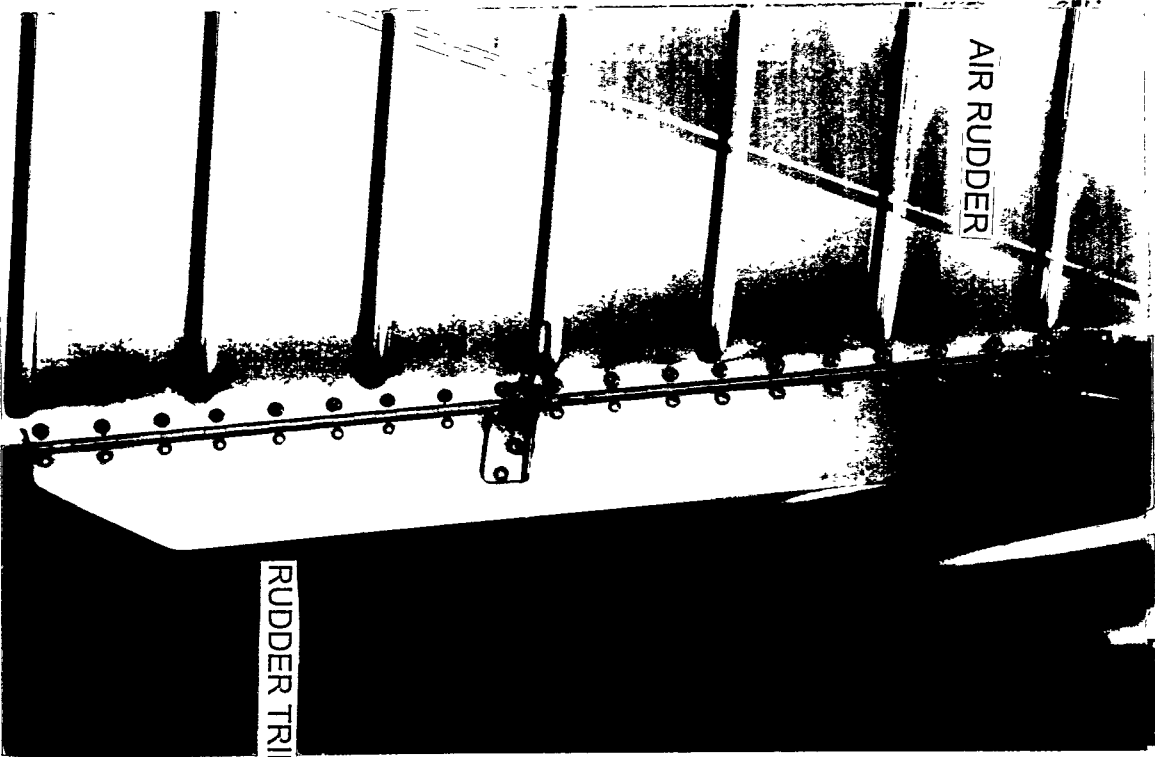
ROCKER SWITCH



INDICATOR

N/A
MERZIMER AIRCRAFT COMPONENTS, INC.

1966 Vineyard Ave. Visca CA 92083
 (619) 598-0592



RUDDER TRIM TAB

AIR RUDDER



AIR RUDDER

MAC SERVO

N6267K
RUDDER TRIM TAB

DEAR VALUED CUSTOMER.

THANK YOU FOR PURCHASING A MAC SERVO. WE HAVE MADE THE UTMOST EFFORT TO DESIGN AND MANUFACTURE THE MOST RELIABLE PRODUCT POSSIBLE. ALL MAC PRODUCTS ARE WARRANTED FOR 1 YEAR FROM DATE OF PURCHASE. IF YOU SHOULD HAVE PROBLEMS WITHIN THAT PERIOD. RETURN THE ITEM TO MAC INC. WE WILL REPAIR OR REPLACE IT AT NO COST TO YOU IF MAC INC. DETERMINES THAT FAILURE OCCURRED THROUGH NORMAL USE. AND NOT DUE TO ABUSIVE TREATMENT OR FAULTY ELECTRICAL WIRING.

INFORMATION AND SUGGESTIONS:

- SERVO CAN BE TESTED BY MERELY TOUCHING ITS TWO WHITE LEADS ACROSS YOUR CAR BATTERY. REVERSE POLARITY TO REVERSE DIRECTION OF TRAVEL.
- INDICATORS CAN BE TESTED ON YOUR CAR BATTERY BY ATTACHING THE RED STRIPED WIRE TO 12V+ AND THEN GROUND ANY OF THE OTHER WIRES ONE AT A TIME.
- A MINIATURE 9 VOLT TRANSISTOR BATTERY CAN BE USED TO TEST THE SERVO. THESE SMALL BATTERIES ARE VERY USEFUL FOR ACTIVATING THE SERVO WHILE IT IS BEING INSTALLED AND ADJUSTED. OF COURSE, THE SERVO WILL OPERATE SLOWER AND HAVE LESS POWER THAN IT WOULD WITH 12 VOLTS. BUT IT IS ADEQUATE FOR THIS PURPOSE. SOME ULTRALIGHT AIRCRAFT USE THIS BATTERY FOR THEIR ONLY POWER SOURCE TO OPERATE THE TRIM SYSTEM!
- THE PUSHBUTTON SWITCHES (WIRED ACCORDING TO FIGURE 4) WILL ELECTRICALLY SHORT THE SERVO MOTOR TO GROUND WHEN EITHER BUTTON IS RELEASED. THIS IS GOOD BECAUSE IT STOPS THE MOTOR ALMOST INSTANTLY WITHOUT COASTING. IF THE SERVO IS USED AS A TRIM DEVICE IT WILL GIVE MORE PRECISE STOPPING. THE MAC ROCKER SWITCH WILL DO THE SAME SINCE IT IS COMPRISED OF TWO SEPARATE PUSHBUTTON SWITCHES WITHIN ITS HOUSING.
- MAC SERVOS ARE CONSTRUCTED OF A MATERIAL CALLED MINLON 22C MADE BY DUPONT. THIS IS A NYLON BASE WITH MINERALS AND FIBERGLASS ADDED FOR STRENGTH AND DURABILITY. SOME OF THESE FIBERGLASS PARTICALS MAY APPEAR AS WHITE SMUDGES ON THE OUTSIDE SURFACE OF THE SERVO--NOT VERY PRETTY BUT IT DOES MAKE IT VERY STRONG.
- DO NOT ENLARGE THE EXISTING 1/8" PIN HOLE IN THE SERVO OUTPUT SHAFT AS THIS COULD WEAKEN THE SERVO TO PUSHROD CONNECTION UNDER CERTAIN CONDITIONS. IF YOU ARE USING A FITTING THAT REQUIRES A 3/16" CLEVIS PIN I SUGGEST THAT YOU BUSH ITS HOLE SIZE DOWN SO A 1/8" PIN CAN STILL BE USED THROUGH THE SERVO.
- MAC SERVOS SHOULD LAST THE LIFETIME OF YOUR AIRCRAFT. IN ADDITION TO 15 YEARS OF USE BY THE PROTOTYPE MODEL. PRODUCTION SAMPLES HAVE BEEN BENCH TESTED TO 40,000 COMPLETE CYCLES UNDER LOADED CONDITIONS. THIS RELATES TO 244 HOURS (10 DAYS) OF CONTINOUS USE.

MAC 3 POSITION INDICATOR

THEORY OF OPERATION

THE MAC SERVO POSITION INDICATOR IS DESIGNED TO BE INSTALLED IN THE COCKPIT TO GIVE AN INDICATION OF THE SERVO OUTPUT SHAFT POSITION. WHEN THE SERVO REACHES ITS LIMIT OF TRAVEL IN EITHER DIRECTION AN END LIGHT WILL GO ON. THE CENTER LIGHT WILL GO ON WHEN THE SERVO RUNS THROUGH ITS NEAR CENTER POSITION. THE INDICATOR IS CONNECTED TO THE SERVO BY THREE SMALL 26 OR 28 GAUGE WIRES.

INSTALLATION INSTRUCTIONS

MAC INDICATORS WERE DESIGNED TO BE USED IN BRIGHT AREAS. THEY HAVE EXCEPTIONALLY BRIGHT LED'S WHICH ARE INSET SLIGHTLY TO PREVENT DIRECT SUNLIGHT PENETRATION. MOUNT YOURS ANYWHERE IN THE COCKPIT THAT IS CONVENIENT. BUT KEEP IN MIND THAT DIRECT SUNLIGHT ON ITS FACE WILL HAVE A TENDENCY TO BLEACH OUT ITS EFFECTIVENESS. FOR BEST RESULTS I SUGGEST MOUNTING IT IN AN AREA WHICH WILL BE AT LEAST SLIGHTLY SHADED DURING NORMAL DAYLIGHT OPERATIONS.

WIRE ACCORDING TO FIGURE 2. SIMPLY ATTACH THE COLOR CODED LEADS ON THE SERVO TO THE SAME COLORED LEADS ON THE INDICATOR. THE INDICATOR IS ALSO CONNECTED TO 14V+. A 1 AMP FUSE, OR CIRCUIT BREAKER, SHOULD BE USED ON THE POWER LEAD. IF, AFTER INITIAL TEST, YOU FIND THAT THE END POSITION LIGHTS ARE OPERATING IN REVERSE OF WHAT YOU DESIRE, IT WILL BE NECESSARY TO REVERSE THE TWO ORANGE/WHITE COLORED LEADS.

MAC ROCKER SWITCH INSTALLATION INSTRUCTIONS

MOUNT THE MAC ROCKER SWITCH USING THE ENCLOSED 2-56 SCREWS. WIRE ACCORDING TO FIGURE 1. THE TWO WHITE WIRES ON THE SWITCH ARE CONNECTED TO THE TWO WHITE WIRES ON THE SERVO. THE RED/WHITE WIRE IS CONNECTED TO 14V+ THROUGH A FUSE OR CIRCUIT BREAKER. THE BLACK/WHITE WIRE IS CONNECTED TO GROUND.

MAC SERVOS

THEORY OF OPERATION

THE MAC SERVOS ARE DESIGNED TO OPERATE ON 12-14 VDC. A LESSER VOLTAGE CAN BE USED BUT WILL RESULT IN LESS POWER AND SLOWER SPEED. CONNECTING THIS VOLTAGE TO ONE OF ITS POWER LEADS (WHITE) AND GROUND TO THE OTHER (WHITE) LEAD WILL OPERATE IT. IT WILL CONTINUE TO RUN UNTIL THIS POWER IS TURNED OFF, OR UNTIL IT AUTOMATICALLY SHUTS OFF AT THE END OF ITS TRAVEL. SINCE THE THRUST IS GENERATED BY MEANS OF A JACKSHAFT THE OUTPUT SHAFT WILL LOCK IN ANY POSITION WHEN THE POWER IS TURNED OFF. VOLTAGE POLARITY ON THE POWER LEADS DETERMINES THE DIRECTION OF TRAVEL.

INSTALLATION INSTRUCTIONS

SINCE MAC SERVOS ARE USED TO REMOTELY CONTROL MANY DIFFERENT DEVICES, SPECIFIC INSTALLATION INSTRUCTIONS CANNOT BE SUPPLIED. IN GENERAL THEY ARE INTENDED TO BE MOUNTED ON A FLAT SURFACE BY FOUR SCREWS THROUGH THEIR MOUNTING FLANGE. ENCLOSED NUT COUPLING OR CLEVIS CAN BE USED TO MAKE THE SERVO PUSHROD CONNECTION.

A MAC TRIM SYSTEM COMES WITH SERVO, ROCKER SWITCH, 3 POSITION INDICATOR, AND CLEVIS/PUSHROD KIT. INSTALL ALL COMPONENTS AND WIRE ACCORDING TO FIGURES 1 AND 2. YOU CAN USE VERY SMALL 26-28 AWG WIRE TO MAKE ALL WIRING CONNECTIONS. TWO WIRES WILL CONNECT THE ROCKER SWITCH TO THE SERVO, AND THREE WIRES WILL CONNECT THE SERVO TO THE 3 POSITION INDICATOR.

IF YOU HAVE PURCHASED A MAC SERVO INDIVIDUALLY, YOU MAY USE ANY SWITCHING DEVICE THAT SUITS YOUR SPECIFIC NEEDS. REMEMBER THAT THIS SWITCH WILL HAVE TO REVERSE THE VOLTAGE POLARITY TO THE SERVO ALONG WITH SWITCHING IT ON AND OFF. FOLLOW WIRING DIAGRAM FIGURE 3 OR FIGURE 4 DEPENDING ON THE TYPE OF SWITCH USED. IF YOU WANT THE SERVO TO TRAVEL TO ITS EXTREME END POSITIONS WITHOUT STOPPING, A SIMPLE DPDT SWITCH WILL DO. IF YOU WANT A TRIMMABLE SERVO THAT WILL STOP IN ANY POSITION, YOU WILL NEED A DPDT SWITCH WITH A CENTER OFF POSITION, OR TWO SPDT PUSHBUTTON SWITCHES.

WIRING CONNECTORS ARE NOT INCLUDED IN THE MAC SERVO SYSTEMS. YOU MAY USE ANY TYPE DESIRED, OR SIMPLY SOLDER ALL CONNECTIONS AND INSULATE WITH A HEAT-SHRINKABLE SLEEVING. FUSES OR CIRCUIT BREAKERS ARE ALSO NOT INCLUDED, BUT THEY ARE RECOMMENDED FOR ALL INSTALLATIONS.

CAUTION

MAC INC. DOES NOT RECOMMEND THE SERVOS BE INSTALLED IN AN AIRCRAFT TO OPERATE ANY APPARATUS OR CONTROL SURFACE THAT, IF FAILURE SHOULD OCCUR, WOULD BECOME MECHANICALLY DAMAGING, DANGEROUS, OR LIFE-THREATENING. WHEN A SERVO IS INSTALLED IN AN AIRCRAFT, ALL WEIGHT AND BALANCE INCLUDING THAT OF THE CONTROL SURFACES WILL BE AFFECTED. SERVOS SHOULD NOT BE INSTALLED UNLESS FULL KNOWLEDGE OF THE EFFECTS OF THIS CHANGE IN WEIGHT AND BALANCE ARE UNDERSTOOD.

REVISED EQUIPMENT LIST
REPUBLIC SEA BEE

DATE: 12-19-95 SERIAL NO.: 477
MODEL: RC-3 "N" NO.: N6267K

ITEMS OF EQUIPMENT INSTALLED:

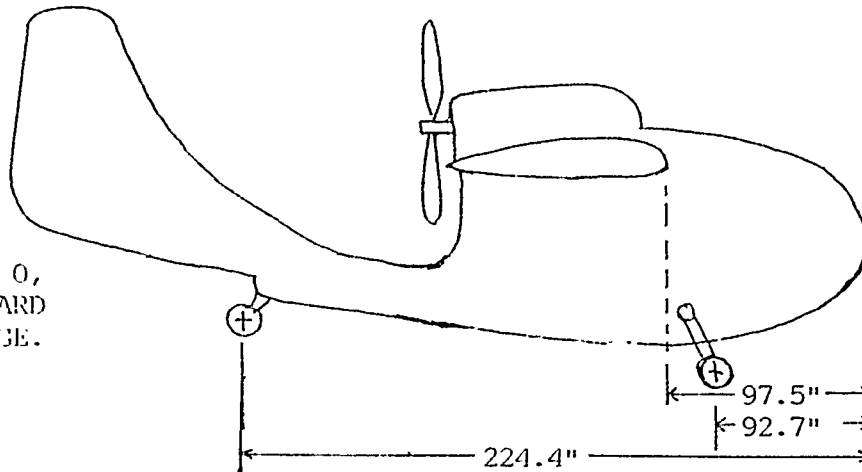
EMERGENCY LOCATOR TRANSMITTER M/N EBC-102A
5-LB. DANFORTH ANCHOR/10-FT. 5/16" CHAIN/50-FT. 1/2" NYLON LINE
2½-LB. HALON 1211 FIRE EXTINGUISHER
COMPASS
FOUR (4) EASTERN AERO MARINE LIFE VESTS
SOUTHWIND HEATER
KING KR86 ADF
604 II MORROW LORAN
NARCO COM 120
AT150 NARCO TRANSPONDER
NARCO 122 NAV
ENCODING ALTIMETER
SIGTRONICS INTERCOM
AIRSPEED INDICATOR
ARTIFICIAL HORIZON
ALTIMETER
MANIFOLD PRESSURE/FUEL FLOW METER
ELECTRIC TURN AND BANK
DIRECTIONAL GYRO
VERTICAL SPEED INDICATOR
TACHOMETER
FUEL QUANTITY GAUGE
EXHAUST GAS TEMP/CYLINDER HEAD TEMP GAUGE
OIL TEMPERATURE GAUGE
OIL PRESSURE GAUGE
VOLT/AMP METER GAUGE
FUEL PRESSURE GAUGE
PROPELLER PRESSURE GAUGE
FOUR (4) BILGE PUMPS
TAIL STROBE LIGHT
WING LANDING LIGHT
HARTZELL 3-BLADE PROPELLER
ALTERNATOR
OIL FILTER

2 CESSNA "172" SEATS
2 MAC SERVOS & INDICATORS

REVISED WEIGHT & BALANCE
REPUBLIC SEA BEE

DATE: 12-19-95
DEL: RC3

SERIAL NO.: 477
"N" NO.: 6267K



DATUM: HULL STA. 0,
LOCATED 97.5" FORWARD
OF WING LEADING EDGE.

LEVELING MEANS:
LUGS ON FRONT
AND REAR OF
LEFT AND RIGHT
DOOR FRAMES.

AIRCRAFT WEIGHT

POSITION	SCALE READING	TARE	NET WEIGHT
LEFT WHEEL	1185	15.0	1170
RIGHT WHEEL	1188	12.0	1176
TAIL WHEEL	609	5.0	604
TOTAL	2982	32.0	2950

NOTE: AIRCRAFT WEIGHT WITH FUEL @ 75 GALLONS = 450 LBS. AND OIL CAPACITY @ 12 QTS. @ 22.5 LBS.

CORRECTED WEIGHT & BALANCE

ITEM	WEIGHT	ARM	MOMENT
AIRCRAFT EMPTY WT.	2522.5	120.5	303961.0
UNUSABLE FUEL	0	0	0
UNUSABLE OIL	0	0	0
TOTAL	LICENSED EMPTY WT. 2522.5 LBS.	EMPTY C.G. 120.5 INCHES	TOTAL MOMENT 303961 INCH LBS.

WEIGHT & BALANCE INFORMATION

GROSS WEIGHT: 3150 LBS. - NORMAL CATEGORY
2810 LBS. - UTILITY CATEGORY

C.G. RANGE: +111.5 to +118.3 WITH LANDING GEAR DOWN. GEAR RETRACTION MOMENT +2900 INCH LBS.

FRONT SEATS LOCATION @ + 62.0
REAR SEATS LOCATION @ + 96.0
MAXIMUM BAGGAGE 200LB @ +118.0
FUEL CAPACITY 75 GAL @ +116.0
OIL CAPACITY 3 GAL @ +136.0

N6267K FLIGHT MANUAL SUPPLEMENT

RUDDER TRIM OPERATION

1. To operate the rudder trim, simply depress the spring loaded rocker switch in the direction rudder trim is needed.

For example, during take-off and climb right rudder trim will be required to compensate for "P" factor. Depress the rocker switch to the right until rudder pedal pressure is no longer required and the ball is centered on the turn and bank indicator.

IRREGULAR OPERATION

1. In case of a trim runaway, simply depress the rudder pedal in the opposite direction of the runaway.



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

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 Cessna	Model 195
	Serial No. 7275	Nationality and Registration Mark N4707V
2. Owner	Name (As shown on registration certificate) John R. Greeff	Address (As shown on registration certificate) Hot Springs Aviation Manley Hot Springs, AK 99756

3. For FAA Use Only

THE DATA IDENTIFIED HEREIN COMPLIES WITH APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS APPROVED ONLY FOR THE ABOVE DESCRIBED AIRCRAFT SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43.7

4-1-95 *[Signature]*
 DATE FAA INSPECTOR, NM-FSDO-01

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in Item 1 above) ~~~~~				X
POWERPLANT	APPROVED SIMILAR				
PROPELLER	INSTALLATION				1995
APPLIANCE	Type	A/C			
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address John R. Greeff P.O. Box 862 Yelm, WA 98597	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. A&P #1449887
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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 4-1-94	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 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 5-5-95		Certificate or Designation No. 559345551	Signature of Authorized Individual <i>Joseph L. Hopkins</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.)

REPLACEMENT OF ENGINE AND PROPPELLER
ON AIRCRAFT REGISTRATION MARK N12345
DATE WORK COMPLETED 12/15/88

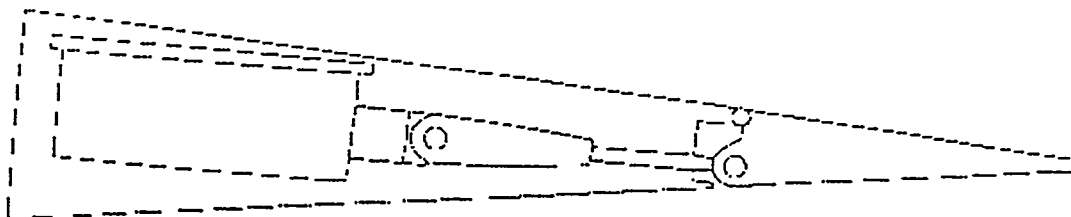
Additional Sheets Are Attached

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8. DESCRIPTION OF WORK ACCOMPLISHED *(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

An electric AILERON TRIM system was installed, utilizing Menzimer Aircraft Components, Inc, MAC S4 Servo, Rocker Switch, Three Position Indicator, and Clevis/Pushrod Kit. Installation of the MAC components were in accordance with MAC installation Instructions. The servo was mounted in the right aileron as depicted below. The Rocker Switch and the Three Position Indicator were mounted on the Control Column Cover below the rudder trim and powered from the Primary Bus through a 1 amp circuit breaker.



The TRIM TAB was removed and replaced with a locally manufactured unit, of the same material (.016" 2024T3) dimension and profile, that includes a rib and spar. It was attached in place with MS 20001 Hinge. The operational range of the tab is 40 degrees (20 degrees either side of neutral) which provides adequate lateral imbalance adjustment while not exceeding a reasonable corrective control pressure in the event of a full deflection runaway trim condition.

With all units in place, the aileron was balanced in accordance with Maintenance Instructions, TM 1-1C-126LA-2 Cessna LC-126A,B,C.

———— CONTINUED ————

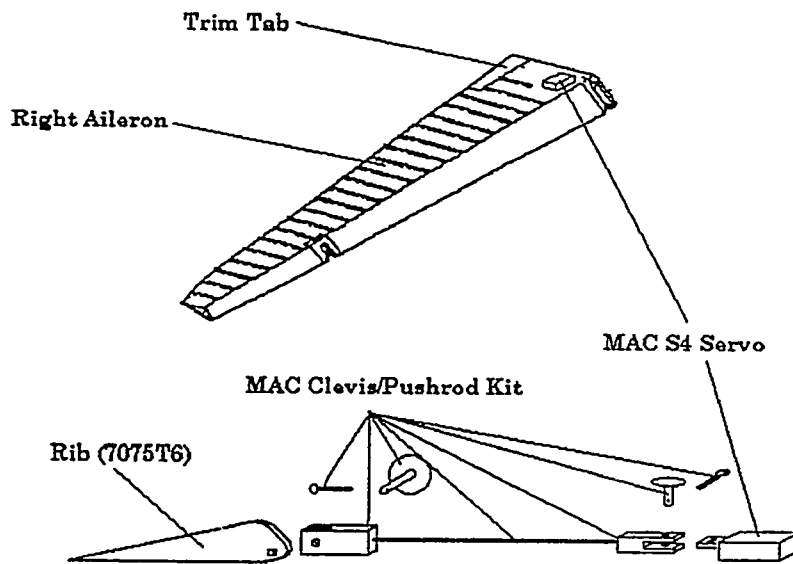
ADDITIONAL SHEETS ARE ATTACHED

NOTICE

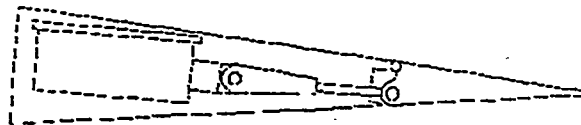
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Drawing - Trim Tab 1



Selected Installation Configuration - Cessna 190 SN 7698



Use a **MAC S4 SERVO** for installations having a short ($\frac{1}{2}$ " to $1\frac{1}{4}$ ") control horn.

-----CONTINUED-----

ADDITIONAL SHEETS ARE ATTACHED

NOTICE

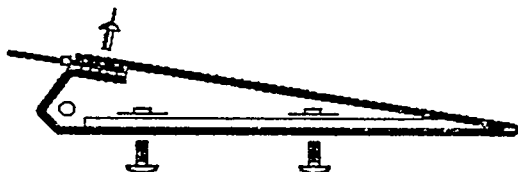
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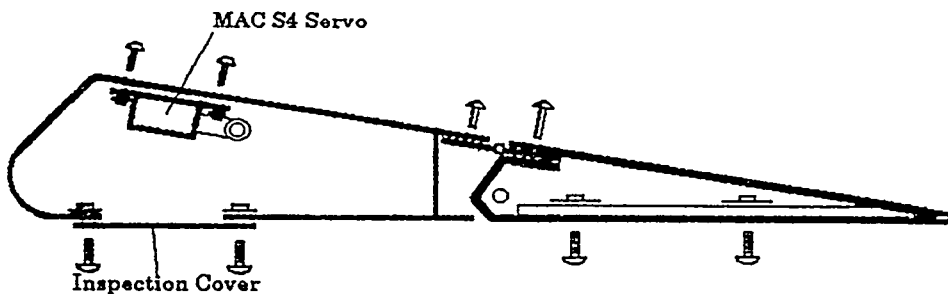
Drawing - TrimTab 2



Trim Tab - End View





Trim Tab - End View - Rib Installed





End View - Aileron - Trim Tab Installed

LEGEND


 MS20365-632 Screws

 MS21044-632 Nut Plates

 MS20470AD4 Rivets
or CR163 Cherry Rivets

 Trim Tab formed from 2024T3

 Rib/Control Horn (7075T6)

 MS20001P3 Hinge

----- NOTHING FOLLOWS -----

ADDITIONAL SHEETS ARE ATTACHED

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8. DESCRIPTION OF WORK ACCOMPLISHED *(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

Aircraft weighed and Weight and Balance computed after alteration.

Equipment List revised to reflect alteration.

Pilot Handbook appended to include alteration.

All work performed in accordance with ADVISORY CIRCULAR 43.13-1A-2A, Change 3, Revised 1988; Chapter 2 Section 1 Paragraph 55a,b,c,e; Chapter 5 Paragraphs 228, 230, 232, 233; Chapter 6 Paragraph 249; Chapter 11 Section 1 Paragraph 410; Section 2 Paragraphs 424, 426, 428, 429, 430 Section 3 Paragraphs 442, 443, 444, 445, 448, 449, 450, 451, Section 4; Section 5 Paragraphs 514, 515, 516, 517, 518, 518-1, 519; Section 7; Chapter 13 Paragraphs 659, 662.

References:

Cessna LC-126A,B,C TM1-1C-126LA-2 MAINTENANCE
INSTRUCTIONS,
CESSNA SERVICE MANUAL AN 01-125 CA-3

ADDITIONAL SHEETS ARE ATTACHED