



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 170B
	Serial No. 25542	Nationality and Registration Mark N727Z
2. Owner	Name (As shown on registration certificate) Gregory L Dohrer	Address (As shown on registration certificate) 113 Castlegate St. Longview, TX 75604

3. For FAA Use Only

The alteration identified herein complied 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

2-21-96

Date

JCH
FAA Inspector, DAL-FSDO

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.
Jesse Loffer J.L. Aero GGG Airport, Longview, Tx	<input checked="" type="checkbox"/> U.S. Certified Mechanic	A&P 1968651
	<input type="checkbox"/> Foreign Certified Mechanic	
	<input type="checkbox"/> Certified 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 2-20-96	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 Flt. 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 2-21-96		Certificate or Designation No. IA1968651		Signature of Authorized Individual Jesse Loffer 	

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 exhaust tail pipe extensions manufactured for Cessna models 170A, 170B and 172. Tail pipe material is type 321 2 inch diameter .035 wall thickness spec. MIL-T-8808 ANL 8606 AMS-5557 and 55576, heat treated 637583. Tail pipes are installed on the outlet of muffler in the same manner as original extensions, using the same attachment clamps and hardware as original. Aft tail pipe hanger brackets fabricated per instructions, aft end of tail pipes are hung with 2 ea. U-style exhaust clamps mounted to a 4130 steel channel which is shock mounted to the lower engine mount using adel clamps and springs. Installation done according to attached drawing.

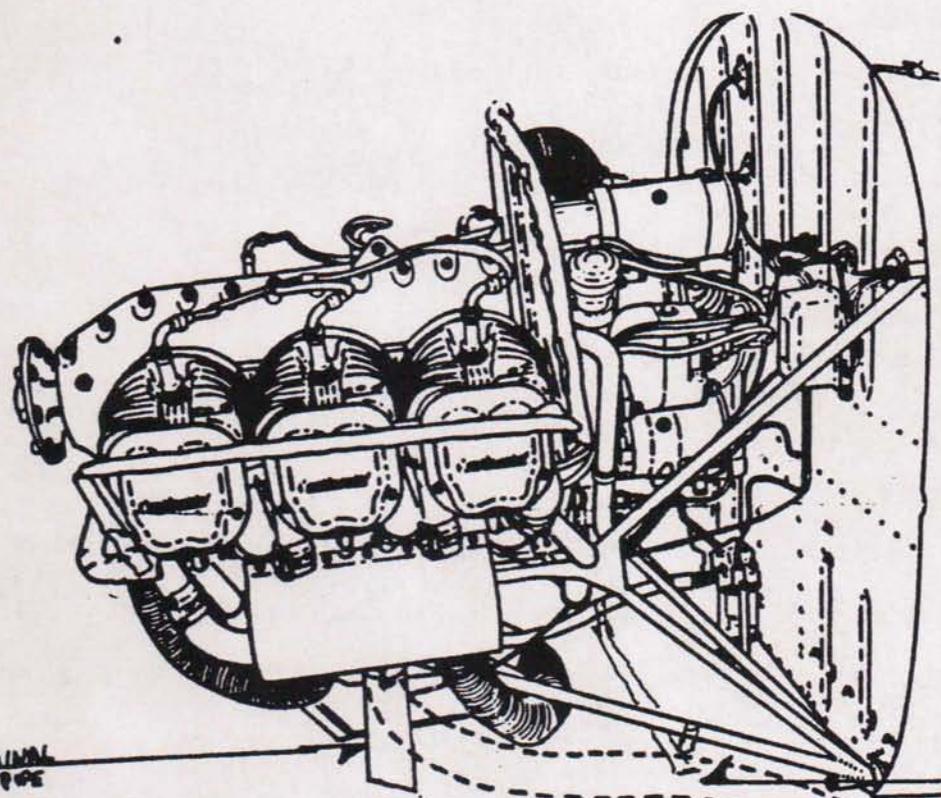
Continental engineering was contacted through Continental rep. Al Beach about the modification on Feb. 15, 1983. Al Beach said they could not see any problem with this modification on the operation of the O-300-A. Teledyne Continental Motors, Mobile Alabama.

This installation is based on a previous field approval on Cessna N4139F dated Oct 13, 1987 and approved Feb 25 1988 by SW-FSDO-68.

-- END --

Additional Sheets Are Attached

Fig 1



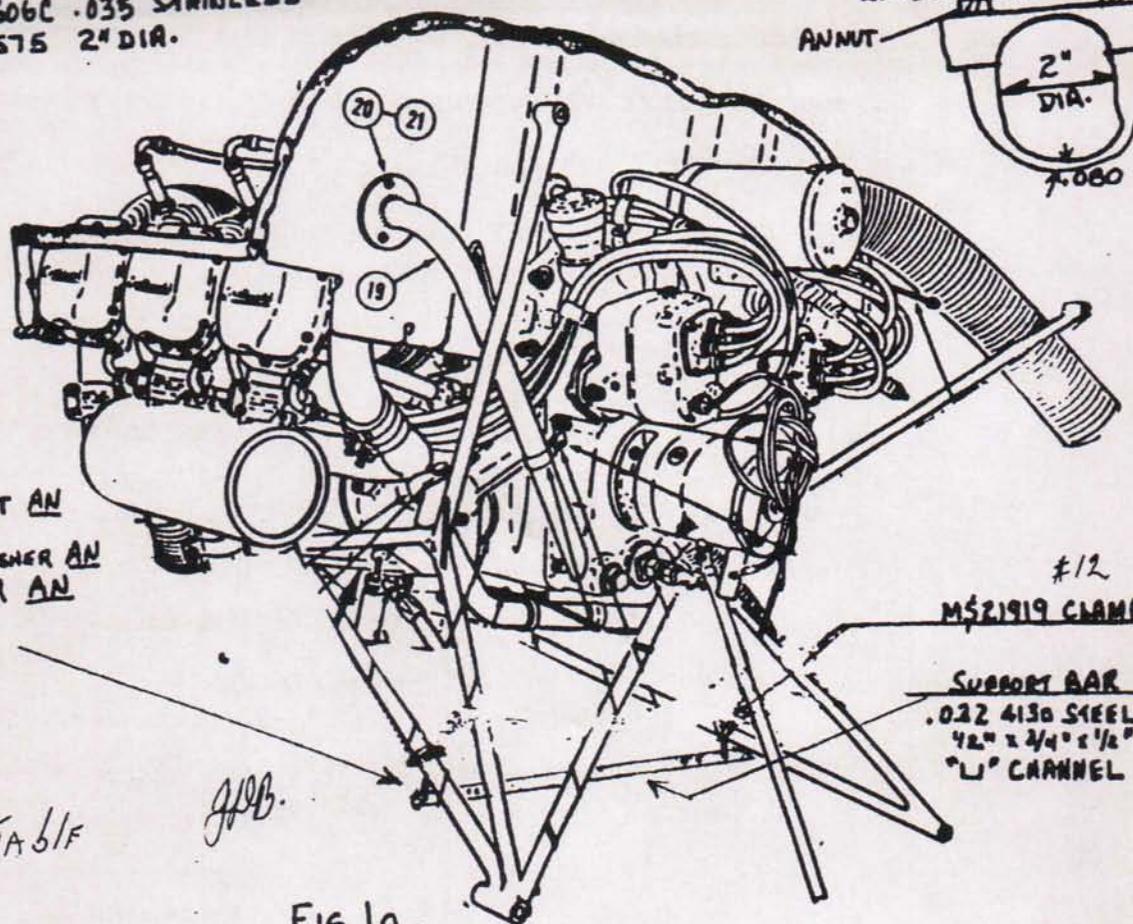
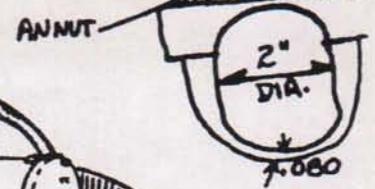
ORIGINAL TAILPIPE

* EXTENSION

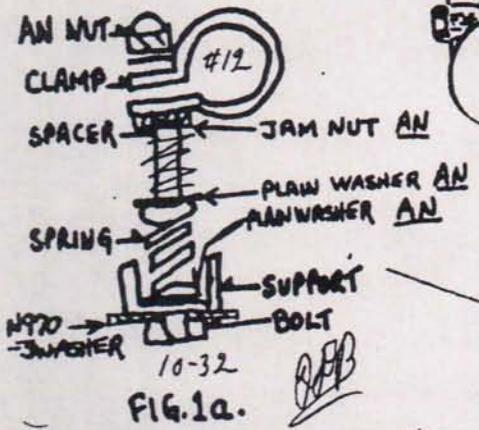
FMS IN CO CENTER HOLLOW AT FIREWALL

2" STEEL (AUTOMOTIVE) "L" STYLE EXHAUST SADDLE CLAMPS

* MIL-8808B TYPE 2-8606C .035 STAINLESS HEAT TREATED B21575 2" DIA.



CROSS SECTION OF SUPPORT ASSY.



#12 MS21919 CLAMPS

SUPPORT BAR .022 4130 STEEL 4/8" x 3/4" x 1/2" "L" CANNEL

3 spring Adjustable

Fig 1a.

HARDWARE LIST

- 1- CROSS SUPPORT BRKT 4130 STEEL .032 $\frac{1}{2}$ - $\frac{3}{4}$ - $\frac{1}{2}$ x 21".
- 2- AN3-27 BOLT
- 4- AN363-1032 NUT
- 4- AN363-428 NUT
- 2- AN970-3 WASHER
- 4- AN960-10L WASHER
- 2- M521919-612 CLAMP
- 2- NA5330A-1/4 28 / 1/2 x .080 - MIL-S-7720 U' BOLTS OR STRAP
- 2- LC-029C-3 SPRING
- 2- SPACER $\frac{3}{16}$ " ID - .062 WALL THICKNESS x $\frac{3}{4}$ " length.

INSTRUCTIONS

THE PILOT HOLE & THE SLOTS ON THE TOP END OF THE EXHAUST PIPES ARE MADE SO THAT THE PIPE CAN BE PROPERLY INSTALLED.

PROCEDURE IS AS FOLLOWS:

1. REMOVE COWL & ORIGINAL STACKS (RETAIN ALL HARDWARE).
 2. PLACE NEW STACKS ON EXHAUST MUFFLER AND ALIGN IT IN A MANNER SO THAT DOWNSPOUTS FIT IN THE HOLLOW OF THE BELLY AND ARE PARALLEL & STRAIGHT BACK.
 3. INSTALL 'U' BOLTS TO EXTENSIONS AND SUPPORT CHANNEL.
 4. INSTALL SUPPORT ASSY. HARDWARE TO CROSS BRACKET
 5. ALIGN ALL PARTS OF AFT HANGAR SUPPORT ASSY. SO THAT AN3-27 BOLTS ARE AS NEAR TO VERTICAL AS POSSIBLE, THEN ATTACH TO ENGINE MOUNT TUBING USING CLAMPS.
- *1 NOTE: KEEP CLEAR OF CONTROL CABLES & FUEL LINES MIN. 1 INCH. MARK TAIL PIPE AT HOLE IN MUFF.
6. REMOVE THE PIPE, DRILL THE PILOT HOLE IN PIPE TO ACCOMMODATE CLAMP PIN AND PUT THE SLOTS IN THE PIPE, IN THE SAME CONFIGURATION AS OLD STACK, WITH A HACKSAW. (SEE #2 NOTE)
 7. INSTALL EXTENSION & AFT HANGAR ASSY LOOSELY, CHECK FOR ALIGNMENT & SECURITY, RUN ENGINE THEN RECHECK BOLT TORQUES.
 8. INSTALL COWLING & CHECK FOR CLEARANCE.

*2 NOTE: USE ORIGINAL CLAMP & HARDWARE (#1) TO SECURE NEW TAIL PIPE EXTENSION TO MUFFLER.