United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA1480GL

This certificate, issued to Craig Cappuccilli
639 Williamsville
Toledo, OH 43609

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations. (See Type Certificate Data Sheet No, 3A19 for complete certification basis).

Original Product — Type Certificate Number: 3A19

Make: Cessna

Model: 150F, 150G, 150H, 150J, 150K, A150K, 150L, A150L, 150M, A150M, 152, A152

Description of Type Design Change:

Install portable hand control as manufactured under Supplemental Type Certificate SA860S0 and SA861S0 and installed according to Union Aviation, Inc. Installation Instructions dated October 15, 1975.

Limitations and Conditions:

1. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft.

(Continued on Page 2 of 2)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: April 2, 1990

Date of issuance: May 15, 1990

Date reissued:

Date amended:

By direction of the Administrator

Donald P. Michal
Signature

Donald P. Michal, Manager
Chicago Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA1480GL

Date of Application: April 2, 1990
Date of Issuance: May 15, 1990

LIMITATIONS AND CONDITION: (Continued)

2. Only one portable hand control is approved by this certificate unless an installation manual specific to this modification is developed by the applicant and FAA Approved.

3. This certificate does not amend or supercede Supplemental Type Certificates SA860SO and SA861SO in any way.

4. Airplane Flight Manual Supplement dated May 14, 1990, or later FAA Approved revisions is required.

5. This STC approves the portable hand control. The pilot must obtain a statement of demonstrated ability from a Flight Standards District Office prior to any ground or flight operations.

6. The removal procedures of this portable hand control contained in the installation instructions are FAA Approved.

-END-

Mr. Craig Cappuccilli
639 Williamsville
Toledo, OH 43609

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

CESSNA 150F-M and 152

REG. NO. _____

SER. NO. _____

This Supplement must be attached to the FAA Approved Airplane Flight Manual when the airplane is modified by the installation of Union Aviation hand controller in accordance with STC SA1480GL dated May 15, 1990. The information contained herein supplements or supersedes the basic manual only in those areas listed. For limitations, procedures and performance information not contained in this supplement, consult the basic Airplane Flight Manual.

FAA APPROVED: Gary S. Louser
FOR Donald P. Michal, Manager
Chicago Aircraft
Certification Office
FAA Central Region

DATE: May 15, 1990

Mr. Craig Cappuccilli
639 Williamsville
Toledo, OH 43609

SECTION I. LIMITATIONS

No change.

SECTION II. OPERATING PROCEDURES

General

The Union Aviation Hand Control enables the pilot to have full rudder, nose wheel and brake control of the aircraft. The control arm extends from the rudder pedals upward and rearward on the pilot's right side. The control ring is mounted on the control arm at the upper end and is adjustable for the pilot's requirements. The pilot with his arm inserted through the ring may position his hand on the throttle and move the control left or right as required with forearm and wrist movement. Movement of the control arm to the left deploys the left rudder. By raising the bar in the left position left rudder is still deployed and the left brake is activated. Movement to the right attains the same results with right rudder pedals in neutral position, lifting of the arm activates both brakes.

If the pilot chooses to use the control without the control ring attached he may develop his own techniques moving his right hand from the bar to the throttle or flaps. This may limit the utility of the control.

Taxi

During taxi the nose wheel is steered through rudder deployment and if required brake may be used. Due to the amount of travel required it may be advisable to use the left hand to operate the control in hard left turns leaving the right arm for throttle control. Also, the left hand may be used to hold brake while the run-up is conducted. The control wheel can be left free during normal taxi conditions.

Takeoff

With pilot's hand through the control ring and on the throttle advance the throttle while gradually adding right forearm pressure to offset the torque and maintain runway heading. Lift off is accomplished in the normal manner with the left hand on the control wheel. At the pilot's discretion he may remove his arm from the ring and maintain rudder pressure,

holding the bar or ring in his right hand. During rotation maintain climb attitude to preclude nose wheel touchdown should the aircraft contact the runway after lift off. Directional control is maintained with coordinated rudder and aileron during climb out.

Flight Operation

During flight many maneuvers can be made without use of the rudder. However, the pilot can use the control to perform slips, stalls and other maneuvers with his arm through the control ring and hand on the throttle, or simply using the control with his right hand.

Landing

The landing approach is made with the pilot's arm through the control ring and his hand on the throttle. Normal crosswind landing techniques are used as required. With the pilot's left hand on the control wheel and his right forearm providing directional control with rudder and his right hand controlling the throttle. Flaps should be extended as desired early on final approach because it may require removing the pilot's arm from the control ring to reach the flap control.

Aborted Landings

Normal procedures for a go-around should be used. The pilot may have to remove is arm from the control bar for flap retraction. This should be done only if the aircraft is not in contact with the ground.

SECTION III. PERFORMANCE INFORMATION

Maximum demonstrated cross-wind velocity is 12 knots.

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

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: 150L
	Serial No.: 15073746	Nationality and Registration Mark: N18031 U.S.
2. Owner	Name *(As shown on registration certificate)*: Mindy Desens dba Lucky Mindy Aviation	Address *(As shown on registration certificate)*: 24032 627th Litchfield, MN 55355

3. For FAA Use Only

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.
Leaders Flying Service, Inc. Box 157 Clear Lake, MN 55319	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	A&P 1428281

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	Signature of Authorized Individual
9/14/94	Bob Leaders

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						Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	A&E
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
9/14/94		Bob Leaders

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.)

Installed Union Aviation, Inc. Hand Control Model C, S/N C1175 IAW installation instructions with STC #SA 1480GL dated May 15, 1990. Adjustments and checks made per instructions, operations found satisfactory.

FAA approved Supplemental Flight Manual dated May 15, 1990 put in Operator's Handbook.

This Hand Control is to be installed and removed by a certified A&P mechanic or repair facility. The pilot may remove or install this control if properly trained and accepted by the aircraft owner/operator. This installation is considered a pre-flight item.

Weight and Balance data and equipment list amended.

END

☐ Additional Sheets Are Attached

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

U.S. Department of Transportation
Federal Aviation Administration

Memorandum

MANUFACTURING INSPECTION DISTRICT OFFICE
FEDERAL FACILITIES BLDG., RM. 127
CLEVELAND HOPKINS INT'L AIRPORT
CLEVELAND, OHIO 44135

Subject: ACTION: Instl. Approval of Portable Hand Control (Ref. STC SA860SO/Cessna 170 Ser. and STC SA141RM. One only Cessna 150

Date: FEB. 13 1990

From: Manager, Cleveland MIDO

Reply to Attn. of:

To: Donald Michal, Manager, ACE-115C

Attached are copies of subject STC's issued for multiple installations on Cessna 170 Series and STC for (one only Cessna 150).

Mr. Cappuccilli has a problem with the STC issued to a specific Serial No. only, because he rents different serial numbered Cessna 150's, depending on which one is available.

According to my conversation with Mr. Cappuccilli, and his correspondence, he is not a large person and would not have an interference problem with the controls when attached to the Cessna 150/152 series aircraft.

We would greatly appreciate your review of the attached data package and advise Mr. Cappuccilli what, if any, additional data might be needed for the issuance of a multiple STC for the Cessna 150 series.

I would be willing to issue a field approval (337) for the installation. However, field approvals do not appear to be appropriate for multiple serial-numbered aircraft.

If you need additional information, feel free to contact Mr. Cappuccilli or this office.

Original signed by
John C. Curtice

John C. Curtice

cc: Mr. Craig Cappuccilli

U.S. Department of Transportation
Federal Aviation Administration

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FEDERAL FACILITIES BLDG., RM. 127
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Original signed by
John C. Curtice

John C. Curtice

cc: Mr. Craig Cappuccilli