



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

**Transport Airplane Directorate  
Aircraft Certification Service**

1601 Lind Avenue Southwest  
Renton, Washington 98057-3356

In Reply  
Refer To: 130S-11-139

Mr. Brian Reilly  
Butler National Corporation  
19920 West 161<sup>st</sup> Street  
Olathe, KS 66062-2700

Dear Mr. Reilly:

The Federal Aviation Administration (FAA) has received your letter dated April 12, 2011. The letter requests an amendment to supplemental type certificate (STC) ST02097SE approval of your replacement Pitch Calibration Circuit Card Assembly part number 542-2926-36, Yaw Calibration Circuit Card Assembly part number 542-2928-11, Servo Amplifier Circuit Card Assembly part number 542-2922-10, Lateral Coupler Logic Circuit Card Assembly part number 542-2920-07, Trim Coupler Circuit Card Assembly part number 542-2916, DC Longitudinal Circuit Card Assembly part number 542-1342, and Trim Disconnect Circuit Card Assembly part number 542-2918 for the FC-110 autopilot in the Learjet Series 20 aircraft. The parts are to be installed per Master Data List (MDL) document number 01807002, Revision C, dated March 30, 2011.

The FAA finds that you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed amended Supplemental Type Certificate (STC) number ST02097SE (Amended), dated May 6, 2011, to Butler National Corporation, indicating our approval for the replacement boards for the FC-110 autopilot in the Learjet 24, 24A, 24B, 24B-A, 24C, 24D, 24E, 24F, 24F-A, 25, 25A, 25B, 25C, 25D, 25F, 28 and 29 model aircraft.

This amended STC is official FAA approval for the installation and may be used to authorize identical installation on other aircraft of the same model, subject to the limitations noted on the certificate. It may be transferred or otherwise made available to another party by means of a licensee arrangement in accordance with Title 14 Code of Federal Regulations (CFR) section (§) 21.47. The STC holder is requested to advise this office within 30 days after the transfer when it transfers or grants licensee rights to the STC in order that we may take the necessary recording or reissuance action.

If the STC holder agrees to permit another person to use this STC to alter the product, it is the STC holder's responsibility to give the other person written evidence of that permission in the form of a "permission statement." This permission statement should contain the agreement specifying the product to be altered, the STC number, and the person who is being given the consent to use the STC.

As recipient of this approval, except as provided in 14 CFR § 21.3(d), the STC holder is required to report any failure, malfunction, or defect in any product or part manufactured under the STC that the STC holder has determined has resulted or could result in any of the occurrences listed in 14 CFR § 21.3(c).

The report should be communicated initially by telephone to the Manager, Systems and Equipment Branch, ANM-130S, telephone number (425) 917-6464, within 24 hours after it has been determined that the failure, malfunction, or defect required to be reported, has occurred. In addition, written notification to the Manager, Seattle Aircraft Certification Office, ANM-100S, at the above address is required.

If the STC holder plans to manufacture replacement or modification parts for sale in conformance with approved data listed on the certificate, they are required to comply with 14 CFR § 21.303. A parts manufacturer approval (PMA) may be issued under the provisions of 14 CFR § 21.303(d) when the STC holder submits a statement certifying that they have established the fabrication inspection system as required by 14 CFR § 21.303(h). The identification requirements for parts produced under a PMA are in 14 CFR § 45.15. This statement may be in letter form, with reference to the STC number, and should be addressed to the Federal Aviation Administration, Transport Airplane Directorate, Attention: Manager, Seattle Manufacturing Inspection District Office, 2500 E. Valley Road, Suite C-2, Renton, Washington 98057-3356.

Since I am very much interested in the service we provide to the aviation community and the general public, it would be helpful if you would provide your thoughts and comments regarding how the approval process went. To gather this information, we have enclosed a short survey (with a self-addressed, stamped envelope) that I hope you will fill out and return. You will note that the return envelope is addressed to me. You may rest assured that your comments will receive my full attention and that I will hold your comments in strict confidence, should you request I do so. Please note that this survey is common to all Aircraft Certification Offices within the FAA's Aircraft Certification Service and is aimed at enabling the Aircraft Certification Service to deliver the best services to each of our stakeholders.

If you have any questions, please contact Mr. Richard Reed of the Systems and Equipment Branch at telephone number (425) 917-6431, at facsimile number (425) 917-6590, or through electronic mail at [Richard.reed@faa.gov](mailto:Richard.reed@faa.gov).

Sincerely,



*RB*  
Robert D. Breneman  
Acting Manager, Seattle Aircraft  
Certification Office

2 Enclosures

United States of America  
Department of Transportation Federal Aviation Administration  
**Supplemental Type Certificate**

**Number ST02097SE (Amended)**

*This certificate, issued to:*

**Butler National Corporation  
19920 West 161<sup>st</sup> Street  
Olathe, KS 66062-2700**

*certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of **Part 25** of the **Federal Aviation Regulations**.*

*Original Product—Type Certificate Number:* A10CE  
*Make:* Learjet  
*Models:* 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A, 25, 25A, 25B, 25C, 25D, 25F, 28 and 29.

*Description of the Type Design Change:* Installation of replacement circuit boards for the FC-110 autopilot, in accordance with Master Drawing List (MDL) 01807002, Revision C, dated March 30, 2011, or later FAA-approved revision.

*Limitations and Conditions:* Approval of this change in type design applies to the above aircraft model(s) only. This approval should not be extended to other aircraft of this model series unless the installer determines that the relationship between this change and any other previously incorporated approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this certificate, The Aircraft Flight Manual (AFM), and the Instructions for Continued Airworthiness (ICA) must be maintained as part of the permanent records for the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

*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:* August 30, 2010  
*Date of issuance:* December 21, 2010

*Date reissued:*  
*Date amended:* May 12, 2011



*By direction of the Administrator*

A handwritten signature in black ink, appearing to be "D. J. ...".

(Signature)

Acting Manager, Seattle 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.*

# Supplemental Type Certificate

(Continuation Sheet)

## Number ST02097SE (Amended)

**Butler National Corporation**

*Issued:* December 2, 2010

*Reissued:*

*Amended:* May 12, 2011

*Description of the Type Design Change, continued:*

Approved Replacement Circuit Boards per STC ST02097SE:

Longitudinal Coupler, AC	part number 542-2924-14
Longitudinal Coupler, DC	part number 542-2924-16
Roll Calibration	part number 542-2904-17
Lateral Coupler, Signal	part number 542-2914-07

Approved Replacement Circuit Boards Added per STC ST02097SE (Amended):

Pitch Calibration	part number 542-2926-36
Yaw Calibration	part number 542-2928-11
Servo Amplifier	part number 542-2922-10
Lateral Coupler, Logic	part number 542-2920-07
DC Longitudinal Coupler	part number 542-1342
Trim Disconnect	part number 542-2918
Trim Coupler	part number 542-2916

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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.