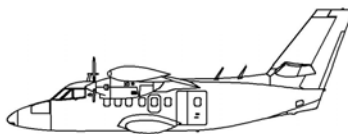




Aircraft Industries



INFORMATION BULLETIN

IB No.: L410UVP-E/502b

Concerns: L 410 UVP-E20 airplanes equipped with FA 2200 Flight Data Recorder up to S/N 3017 inclusive, except S/N 3016.

Subject: Modification of the FA 2200 FDR connection – record of voltage presence on the S1A emergency bus bar. Rename of two registered parameters of FDR.

Reason: Presence of voltage on the S3B bus bar is currently recorded.

**To be carried out
at the latest by:**

During next periodic maintenance check 2.

To be carried out by:

Organization certified for periodic maintenance of L 410 airplanes.

**Material costs
to be covered by:**

Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic.

**Work costs
to be covered by:**

Operator.

**Necessary material
to be delivered by:**

Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic on a request.

Bull. becomes effective: On the day of release.

Total No. of pages: 6

A handwritten signature in blue ink, appearing to read 'za Kaural', is written over a dotted line.

Released: Pavel Jurák
Head of airworthiness dept.

The technical content of this document is approved under the authority of DOA ref. EASA. 21J.119.

Date of release: March 20, 2018

PERFORMANCE: mandatory

1. INSTRUCTIONS FOR PLANNING

A. CONCERNS

1. Airplane type

L 410 UVP-E20

2. Version / S/N

Airplanes up to S/N 3017 inclusive, except S/N 3016.

3. Qualifications for implementation

Airplanes equipped with the FA 2200 Flight Data Recorder.

4. New equipment

Not required.

B. REASON

Modification of the FA 2200 FDR connection – record of voltage presence on the S1A emergency bus bar. Rename of two registered parameters of FDR.

C. DESCRIPTION

Disconnection of the 343K wire from the A50 contactor and K54 relay.
Installation of the new 343K wire to the A24 contactor and K54 relay.
Rename of two registered parameters of the FA 2200 FDR.

D. APPROVAL

This bulletin has been elaborated based on data of design change No. ZKB 058 069.

E. MAN-HOURS

Supposed Man-hours: 4 M-hours

F. MATERIAL - AVAILABILITY

1. New equipment

Not required.

2. Installation parts

Will be delivered by the airplane manufacturer Aircraft Industries, a.s.,
686 04 Kunovice, Czech Republic on a request.

3. Costs

Material: Covered by Aircraft Industries, a.s., 686 04 Kunovice, Czech Republic.

Work: Covered by the operator.

G. SPECIAL EQUIPMENT

- ROSE Analysis Unit (RAU), P/N 17TES0055 (or equivalent laptop computer) with ROSE/RI software, version 3.9 or higher, P/N 17TES0321 (CD ROM).
- Computer Interface Communication Cable CICC/2, P/N 17TES0070 with Cable Adapter, P/N 17TES0072 or Computer Interface Communication Cable CICC/3, P/N 17TES0075 with CAT5 Crossover Ethernet Cable, P/N 024-98-00368.
- Read out Support Equipment/Recorder Interface (ROSE/RI) software system operator's manual, P/N 165E1696-02.

H. WEIGHT AND BALANCE

Influence of the modification on an airplane empty weight and balance is negligible.

I. USED DOCUMENTATION

1. Drawings:

B570 270X sheet 1	FA 2200 FDR wiring diagram (valid for airplanes from S/N 3011 except S/N 3012 and 3013)
B573 949X sheet 1	FA 2200 FDR wiring diagram (valid for airplanes up to S/N 2903 inclusive)
B574 832X sheet 1	FA 2200 FDR wiring diagram (valid for airplanes from S/N 2904 up to 3010 inclusive and S/N 3012, 3013)

2. Maintenance Manual, doc. No. Do-L410-1232.2, chap.:

020.20.00 024.30.04 024.40.00 025.21.00 027.00.00 031.35.00

J. AMENDED DOCUMENTATION

AFM not affected.
MS not affected.
MM Supplement No. 339.
WM Supplement for S/N of the airplane.

2. INSTRUCTION FOR IMPLEMENTATION

A. PREPARATORY WORK

- Disconnect the external power supply plug accord. to the MM, chap. 024.40.00.B.
- Remove accumulators from the airplane according to the MM, chap. 024.30.04.A.
- Remove passengers' seats as needed according to the MM, chap. 025.21.00, page 401.
- Open the panels of the ceiling bay between frames 7 to 12 according to the MM, chap. 027.00.00, point 4.E.(3).
- Open the small door (FDR) on the bulkhead No. 21.

B. DISMOUNTING

- Disconnect and blind the 343K wire from the A50 contactor (lug terminal 1) and K54 relay (lug terminal A) between frames 8 to 9 according to the Supplement of the WM, chap. 031.30.00, FA 2200 FDR installation (sheet 2).

C. MOUNTING

- Install the new 343K wire to the A24 contactor (lug terminal 1) and K54 relay (lug terminal A) according to the B570 270X or B573 949X or B574 832X (sheet 1) wiring diagram. Fasten the wire to the existing cable harness. Use material pos. 1 to 3 of point 3.A. of this bulletin.
- Perform the connectivity check of newly installed connection places.

D. FA 2200 FDR DATABASE PARAMETERS UPDATE

- Rename the *DC Electrical Bus 28VDC S3B Battery* parameter according to the MM, chap. 031.35.00. The procedure shall be provided by the authorized person with full administrator's level access to all ROSE/RI software functions only. Any operation with software according this procedure by the untrained person is strictly prohibited!
- Run ROSE/RI software under the administrator permission on ROSE Analysis Unit (RAU), P/N 17TES0055 (or equivalent laptop computer) with ROSE/RI software, version 3.9 or higher. Select the existing database for appropriate airplane on main menu item „Select Aircraft Configuration“. The database file name is typically saved as LET 410 Aircraft_XXXXXX where XXXXXX means full serial number of the aircraft.
- Select the “Update Database Parameters”. Options not available during an unprivileged user Login will be displayed in grey and will not be selectable. A level of expertise with the Flight Data Recorder system, a clear understanding of flight data parameters, and access to the Airplane Flight Data Parameter Source List is required prior to performing the steps of the database parameters updating procedure.
- Select the item *DC Electrical Bus 28VDC S3B Battery* in the window „Select a Parameter Name“.
- Overwrite *DC Electrical Bus 28VDC S3B Battery* to *DC Electrical Bus S1A Status*. Click „OK“ to confirm.
- Click „Report Header“. Overwrite item „Current Report Header“ to *DC_ELEC_BUS S1A*. Click „OK“ to confirm.
- Rename the *DC Electrical Bus 28VDC S2B Battery* parameter in order to consolidate the parameter name:
- Select the item *DC Electrical Bus 28VDC S2B Battery* in the window „Select a Parameter Name“.
- Overwrite *DC Electrical Bus 28VDC S2B Battery* to *DC Electrical Bus S2B Status*. Click „OK“ to confirm.
- Click „Report Header“. Overwrite item „Current Report Header“ to *DC_ELEC_BUS S2B*. Click „OK“ to confirm.

- Click „Report / Display / Analyze“ in the Main Menu.
- Select the item *A. Master – Discrete Group 01* in the window „Select a Report Name“. Click „OK“ to confirm.
- Click „OK“ to confirm WARNING related to the original parameters.
- Click „Next“ („→“) to select a parameter 3. Click „Shift Right“.
- Select *DC Electrical Bus S1A Status* in the window „Current Report Parameter Name“.
- Click „Next“ („→“) to select a parameter 4. Click „Shift Right“.
- Select *DC Electrical Bus S2B Status* in the window „Current Report Parameter Name“. Click „Save“ and „Close“.

E. TESTS

1. Ground Tests

- Install the airplane accumulators according to the MM, chap. 024.30.04.A.
- Connect the external power supply plug accord. to the MM, chap. 024.40.00.B.
- Switch on the BATTERY I, II; INVERTER 36V AC I, II; RECORDER switches on the overhead panel.
- Switch on alternately the EMERG. BUS BAR II circuit breaker (el. symbol A38) located between frames 1 and 2, RH side and verify a record of voltage presence on the S1A emergency bus bar.

2. Flight Tests

Not required.

F. FINISHING WORK

- Clean spaces where mounting works have been performed from material scraps and dirties.
- Repair damaged paintings with paint according to the MM, chap. 020.20.00.
- Close the ceiling panels between frames 7 to 12 according to the MM, chap. 027.00.00, point 4.E.(20).
- Install passengers' seats according to the MM, chap. 025.21.00, page 401.
- Close the small door (FDR) on the bulkhead No. 21.
- Insert the Supplements into the respective airplane manuals.

3. NECESSARY MATERIAL

A. INSTALLATION PARTS DELIVERED BY THE AIRPLANE MANUFACTURER

Pos.	AI Identifier	Name	Pcs/Aircraft
1	B049 314N	343K wire	1
2	8710 2970	220N Vinytol leatherette	60 x 700
3	8322 4105	A-A-52081-B-5 Lacing tape	3 m

4. RECORD IN THE AIRPLANE LOGBOOK

Modification of the FA 2200 FDR connection – record of voltage presence on the S1A emergency bus bar has been performed according to the L410UVP-E/502b IB.

Date:

Performed:

(legible signature of verification engineer)

Elaborated by: Ing. Vlastimil Lapčik 

Checked by: Ing. Pavel Ulrich 