## AEROPRAKT INFORMATION BULLETIN

# INSPECTION AND REINFORCEMENT OF THE FUSELAGE OF A-22 AIRCRAFT. IB A-22-02

### MANDATORY

#### **Repeating symbols:**

Please, pay attention to the following symbols throughout this document emphasizing particular information.

▲ WARNING: Identifies an instruction, which if not followed may cause serious injury or even death.

■ CAUTION: Denotes an instruction, which if not followed, may severely damage fuselage.

◆ **NOTE**: Information useful for better handling.

#### 1) Planning information

#### 1.1) Aircraft affected

All versions of the aircraft Aeroprakt-22 beginning N = 01 to N = 70.

#### 1.2) Reason

It has been found out, that the reason of the cracks in the diaphragms is the fatigue failure due to aircraft operation on airfields with uneven surface.

#### 1.3) Subject

Inspection and reinforcement of the diaphragm or its replacement for a reinforced diaphragm in case if cracks are detected.

#### 1.4) Compliance

Inspection of the diaphragm is to be carried out regardless of period of operation.

#### 1.5) Approval

The technical content of this Information Bulletin has been approved by Aeroprakt

#### 1.6) Manpower

Estimated man-hours:

Retrofit work according to the section 3.1.1 can be performed within an hour, according to section 3.1.2 within 5 hours

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#### 1.7) Mass data

Change of weight - none

#### 1.8) Other publications affected

None

#### 1.9) Spare parts

Spare parts are sent upon requirement of aircraft owner.

#### 2) Replacement part information

#### 2.1) Replacement part – cost and availability

The price of repair kit according to the section 3.1.1 is 10 USD, and according to section 3.1.2 is 40 USD, excluding delivery

#### 2.2) Special tooling / primer

For section 3.1.1: wrench set, primer.

For section 3.1.2: wrench, drills: Ø3.1, Ø4.1, Ø5.7, Ø7.7; reamers: Ø6H7, Ø8H7; power drill; pop-riveter; primer.

#### 3) Accomplishment / Instructions

#### 3.1) Instructions

Inspect right and left diaphragms (item 1, 2 on fig.1) for absence of cracks. When there are no cracks follow instructions of section 3.1.1. In case when there are cracks follow instructions of section 3.1.2.

#### 3.1.1) Installation of reinforcing diaphragm

The work is carried out according to fig. 2.

- 1) Remove the bolts (item 5);
- 2) Install the replacement bolts (longer ones) and reinforcing diaphragms (items 3, 4) with primer;

#### 3.1.2) Replacement of the diaphragm

The work is carried out according to fig. 3.

- 1) Remove the bolts (item 2, 3, 7) drill out the rivets (item 4, 5, 6);
- 2) Remove the diaphragms (item 1, 2), install the new reinforced diaphragms using temporary screws;
- 3) Fasten the diaphragms with Ø4 stainless steel flush pop-rivets (item 4); Ø3 aluminium pop-rivets (item 5); Ø4 aluminium pop-rivets (item 6);
- 4) drill close-tolerance Ø6 holes for bolts (items 3, 7) and close-tolerance Ø8 holes D8 for bolts (items 2);
- 5) install bolts (items 2, 3, 7) with primer;
- **CAUTION**: Do not forget to install the strut attachment fittings (item 8, 9).

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#### 4) Appendix

The following drawings contain additional information:

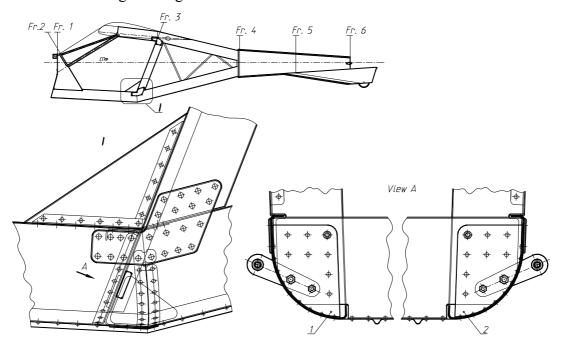


Fig.1

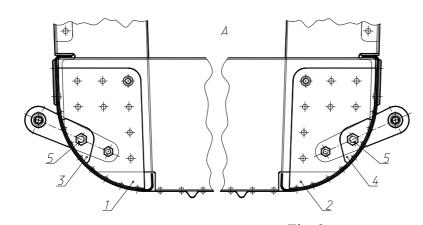


Fig. 2

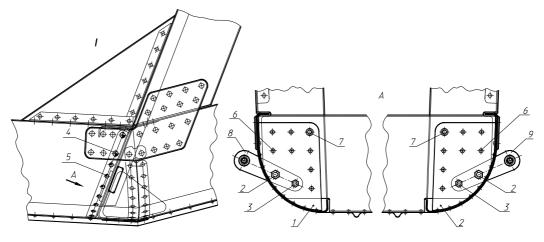


Fig. 3