

## SAFETY BULLETIN

### SB No.: SD-1/012a

#### 1.1 Affected Aircraft

Type: SPACEK  
Model: SD-1 Minisport of all versions  
Serial Number: SN001-SN245, SN247  
Applicable countries: All countries

#### 1.2 Concurrent document

-none-

#### 1.3 Reason

The inflight release of flaperon from the wing occurred on one SD-1 due to loss of middle and tip hinge bolts. Pilot has activated parachute rescue system and airplane descended safely into field.

To avoid misunderstanding and difficulties in interpretation, please consider the following information:

- There is significant fleet of SD-1 aircraft in service with rough estimation of minimally 40000 h fleet total time
- The tests during certification have shown that bolt in this kind of joint cannot release itself incidentally in the service
- It was the first accident of this kind in the SD-1 service history
- The middle and the end bolt position should be checked easy at the pre-flight inspection

#### 1.4 Subject:

##### Action 1:

The flaperon hinges bolts torque check.

##### Action 2:

Optional flaperon hinge end bolts stops installation.

**To be performed by:** Owner/Operator

**Cost to be covered by:** Owner/Operator

**Necessary material to be delivered by:** In accordance to operator discretion. The material could be shipped by the manufacturer for shipping fee or could be made by owner in accordance to drawing or DXF file (see further).

**Bulletin becomes effective:** On the date of its issue

**Total No. of pages:** 3

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Igor Špaček  
Designer

## 1.5 Compliance

### Action 1:

Compliance must be demonstrated prior next flight. Inspection must be performed on all SD-1 airplanes in the service.

### Action 2:

Compliance is not compulsory. Fitting of the safety flaperon end bolt stop plate is at owner decision.

## 1.6 Approval

Not applicable

## 1.7 Type of maintenance

### Action 1:

Not applicable

### Action 2:

Light

## 1.8 Release to service

Conduction of this SB (ref. 1.5 Compliance - Action 1 eventually Action 2) must be logged in the aircraft log book with the date and signature of responsible person according to the national applicable regulations for the country of registry of the aircraft.

## 1.9 Weight and balance

### Action 1:

Not applicable

### Action 2:

Minor

## 1.10 References

1. Drawings:

SD1-20-250

2. Documents:

The SD-1 Flight and Maintenance Manual SD-1

## 2 INSTRUCTIONS

### Action 1:

1. Remove cover of the flaperon end bolt installation hole in the bottom of wing tips if installed.
2. Progressively check if the head of middle and end hinge M5x25 DIN931 bolts are tightened fully so that they contact plastic bearing.
3. Move flaperons and check if bolts turn alongside. The check is finished when all bolts are tightened and move alongside with flaperons.
4. In case of negative test result release affected bolt. Check length of bolt and the thread condition. If the bolt is OK use Loctite 243 on the thread and install bolt again. Otherwise exchange it.
5. Repeat test of bolt tightening on following day.
6. This action should be performed as a part of pre-flight check as well final check before test flight of finished or repaired airplane.

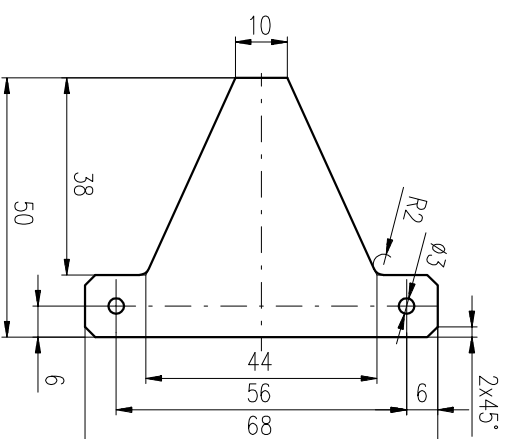
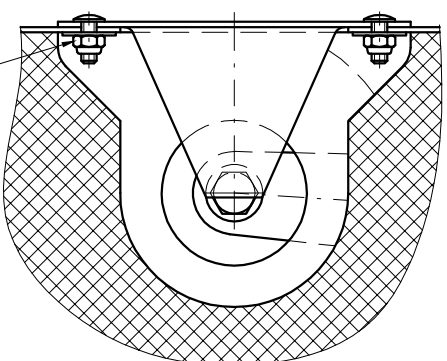
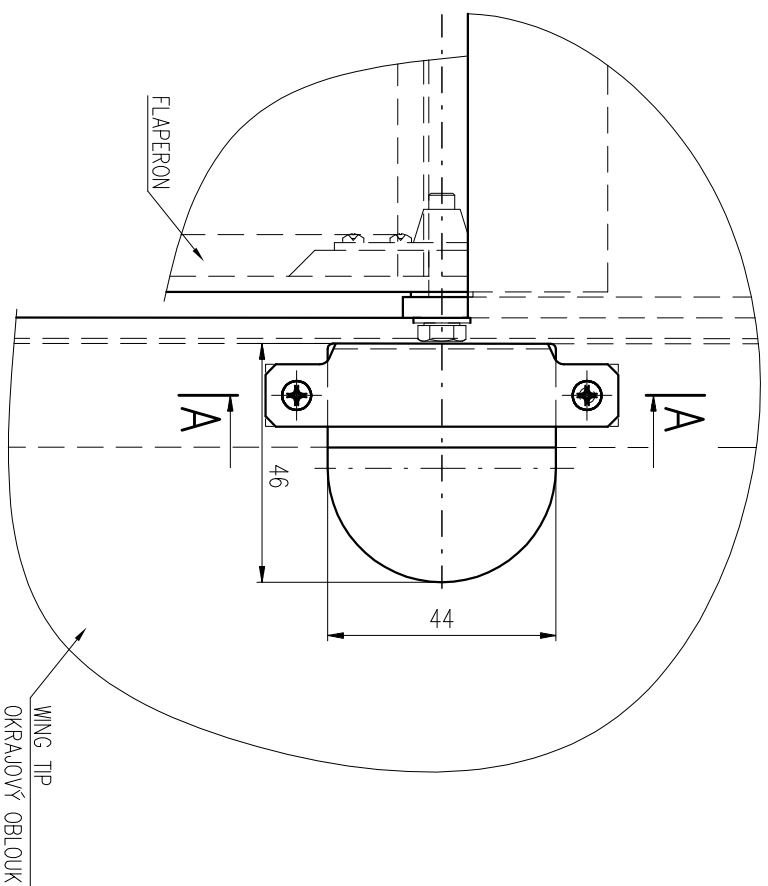
### Action 2:

1. See drawing SD1-20-250 for reference.
2. Modify shape of hole in the bottom of wing tip for end bolt installation in accordance to drawing.
3. Fabricate and bend stops in accordance to drawing.
4. Drill installation holes to the wing tip thru stop. Install stop using prescribed HW.

#### The stop in place before drilling:

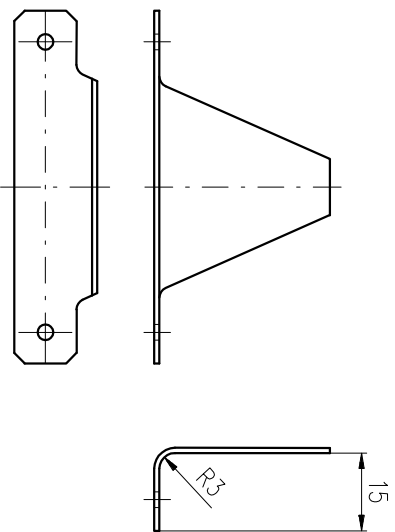


**Necessary tools:** Oscillating saw, small sanding block, drill 3 mm, screwdriver, wrench 5,5 mm.



2024 T. 1

BOLT M3x8 DIN 7985  
ŠROUB  
MUT M3 DIN 985  
ŠROUB  
WASHER 3 DIN 9021  
PODLOŽKA



SEW-PRODUCT: POLTOVAR		ISSUE NUMBER: INDEX		DRAWING CHANGE NOTE ČÍSLO ZMĚN+POZNAMKA		DATE DATUM		SIGNATURE POPS	
MATERIAL:		STRESS: STATIK		APPROVED: SCHVÁLIL:		DATE DATUM		DATE DATUM	
DWT: POKŤET KS:		REMOVE SHARP EDGES & BURRS: HEAVY SRÁŽENÍ:		DATE: DATUM:		DATE: DATUM:		DATE: DATUM:	
WEIGHT: HĚŤOVOSI:		TRACEABILITY: SEDOVATEĽNOSI:		DATE: DATUM:		DATE: DATUM:		DATE: DATUM:	
SCALE: MĚRITKO:		PROJECTION: PROJEKČNÍ:		DATE: DATUM:		DATE: DATUM:		DATE: DATUM:	
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TOLERANCE/UNLESS STATED OTHERWISE: NEJEDNODURČENÉ ROZMĚRY DLE:		ISO 2768 m		DATE: DATUM:		DATE: DATUM:		DATE: DATUM:	
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**SPACEK**  
CZECH REPUBLIC  
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tel:+420 605 409 539

TITLE:  
NÁZEV:  
FLAPERON END BOLT STOP INSTALL.  
INSTAL. DORAZU KRAJ. ŠROUBU FLAP.

REG. No. /  
OSV /KRESL:  
SD1-20-250

SHEET no. 1  
OF 1  
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SIZE:  
FORMÁT:  
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