



THE GLIDING FEDERATION OF AUSTRALIA

GFA AD 566

(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: PW-5 Smyk, all serial numbers.

SUBJECT: Inspection of bonded joint and inspection procedure if de-bonding is found.

BACKGROUND: Cracks may be found in a particular bonded joint, as described in the accompanying PZL-Swidnik Mandatory Bulletin..

DOCUMENTATION: Polish General Inspectorate of Civil Aviation (GICA) Airworthiness Directive No SP-0003-2002-A and PZL-Swidnik Mandatory Bulletin No BO-17-02-16 form part of this AD.

ACTION REQUIRED: Inspect and repair as necessary in accordance with the above-mentioned PZL-Swidnik Mandatory Bulletin.

WEIGHT AND BALANCE: Not affected.

IMPLEMENTATION: Before further flight.

COMPLIANCE: The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:



CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA

RECEIVED
29 JAN 2002

RZECZPOSPOLITA POLSKA
GŁÓWNY INSPEKTORAT LOTNICTWA CYWILNEGO

REPUBLIC OF POLAND
GENERAL INSPECTORATE
OF CIVIL AVIATION

REPUBLIQUE DE POLOGNE
INSPECTORAT GENERAL
DE L'AVIATION CIVILE

ul. Chalubińskiego 4/6, 00-928 Warszawa, Tel. (4822) 630 15 10, Fax. (4822) 630 15 18

Warszawa, dn. 14/01/2002

Warsaw, day/month/year

DYREKTYWA ZDATNOŚCI - AIRWORTHINESS DIRECTIVE

Nr SP -0003 -2002 -A

1. Przedmiot: Szybowce / gliders, model: PW-5 „Smyk”

Product (wyrób / model, wyposażenie, numery - product name / model, appliances, numbers)

2. Numer Świadectwa Typu / Orzeczenia: GILC / GICA BG-194

Type Certificate/Approval Number (Nazwa Nadzoru - Name of Authority)

3. Dotyczy: Sprawdzenia stanu technicznego skleiny i procedury naprawy /

Subject (opis usterki, rysunek części - description of the problem, identification of part)

One time inspection of adhesive-bonded joint and repair procedure

4. Przyczyna wydania: Niniejszą Dyrektywą Zdatności informuje się, że w przypadku

Reason for the issuance of this AD (dla wyrobów importowanych przywołać AD Nadzoru Lotniczego kraju producenta - for imported products .. as in AD " point 6.)

stwierdzenia pęknięcia należy wykonać naprawę uszkodzonej skleiny zgodnie z biuletynem Nr BO-17-02-16 / This AD has been issued to inform that in case the crack is detected, the damaged adhesive-bonding joint is subject to the following repair the bulletin No. BO-17-02-16

5. Działania korygujące: jak w Biuletynie Obowiązkowym / as in Mandatory Bulletin No.

Corrective action (dla wyrobów importowanych wpisać „jak w AD” pkt 6.- for imported products, „as in AD” point 6.)

BO-17-02-16

6. Nazwa Władz Lotniczych wydających AD: -----

Name of Aviation Authority that issued AD (dot zagranicznych AD, podać Nr i datę wydania - for foreign „AD” give Number and date of issue).

7. Dokumentacja związana: Biuletyn Obowiązkowy / Mandatory Bulletin No. BO-17-02-16

Ref. publications (Biuletyn Obowiązkowy - Mandatory Bulletin)

Niniejsza Dyrektywa Obowiązuje z dniem : 21/01/2002

Effectivity date of this AD: (day month/year)

Zygmunt MAZAN

Główny Inspektor IKCSP

Chief Inspector of Civil Aircraft Inspection Board



**WYTWÓRNIĄ SPRZĘTU KOMUNIKACYJNEGO
„PZL - ŚWIDNIK”
SPÓŁKA AKCYJNA**

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Upoważnienie/certyfikat-GILC:
Orzeczenie Nr 003/1
z dn. 05/06/2000

MANDATORY BULLETIN

No. BO-17-02-16

NAME-TYPE/MODEL: PW-5 Sailplane

SERIAL NUMBER: All sailplanes in operation

SUBJECT: **INSPECTION OF ADHESIVE-BONDED JOINT
FOR TECHNICAL CONDITION**

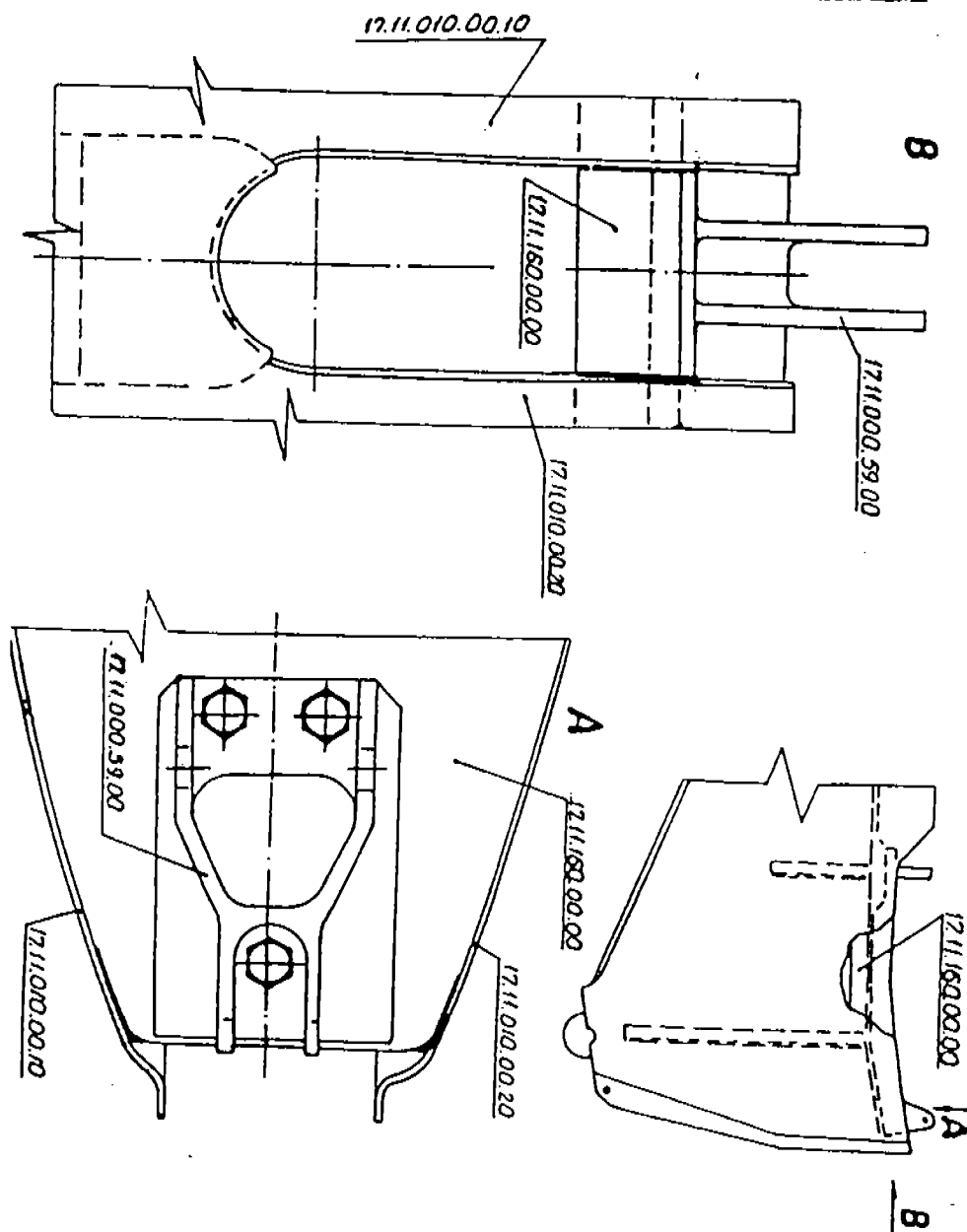
The original Bulletin in Polish language was approved by GILC.
The English translation of the original was approved by the
Manufacturer under delegated authority of GILC.

Włodzimierz J. Sypek
GILC-Authorized Interpreter



I

In relation to the cases of adhesive-bonded joint cracks between the wall P/N 17.11.160.00.00 and the fuselage shell P/N 17.11.010.00.10 or 17.11.010.00.20 after the inspection of sailplanes, series 17.06... and 17.07..., in accordance with the bulletin BO-17-01-15, it is recommended to perform the inspection of the area shown in the enclosed sketch No. 1 in all operated sailplanes.



Sketch No. 1



II

This bulletin has been issued to inform that in case the crack is detected, the damaged adhesive-bonding joint is subject to the following repair procedure:

1. Remove the damaged adhesive-bonding joint.
2. Degrease and roughen both surfaces.
3. Prior to bonding the reinforcement, prepare the rear surface of wall (17.11.160.00.00.) and the adjacent fuselage skins (17.11.010.00.10/20) by degreasing and roughening them.

Note: For roughening, use 180 mesh abrasive paper. Exercise care so as not to damage the cloth structure.

4. Repair the removed adhesive-bonded joint by injecting new bonding composition (epoxy resin EP-53 + hardener Z-1 + filler: 4 parts colloidal silica (Aerosil®, Cab-o-sil®, HDK®N20) by weight per 100 parts resin).
5. Over whole length and width of rear surface of wall (17.11.160.00.00), adhesive bond two layers of Interlass 92125 cloth, impregnated with laminating composition of EP-53 + Z1, which should overlap onto fuselage skins in accordance with sketch No. 2.
6. Perform after-baking of the repaired structure in the following cycle: 24 hrs at temp. 19÷25 C + 15 hrs at temp. 50÷60 C.

Note: Epoxy resin MGS 335 with hardener 335 (Martin G. Scheulfier Kunstharzprodukte GmbH, Germany – see the "List of Materials required to perform repair") may be used instead of EP-53 + Z-1.

When repairing, follow recommendations specified in the PW-5 Sailplane Maintenance Manual, Section 8.

III

Performance of work:

The inspection of adhesive-bonding joint for technical condition shall be made by Operator on his own.

The repair in accordance with para. II above may be performed only by personnel authorized to perform repairs of composite aircraft structures. The repair cost shall be borne by PZL-Świdnik S.A.

The estimated total labour rate is max. 0,5 labour-hour.

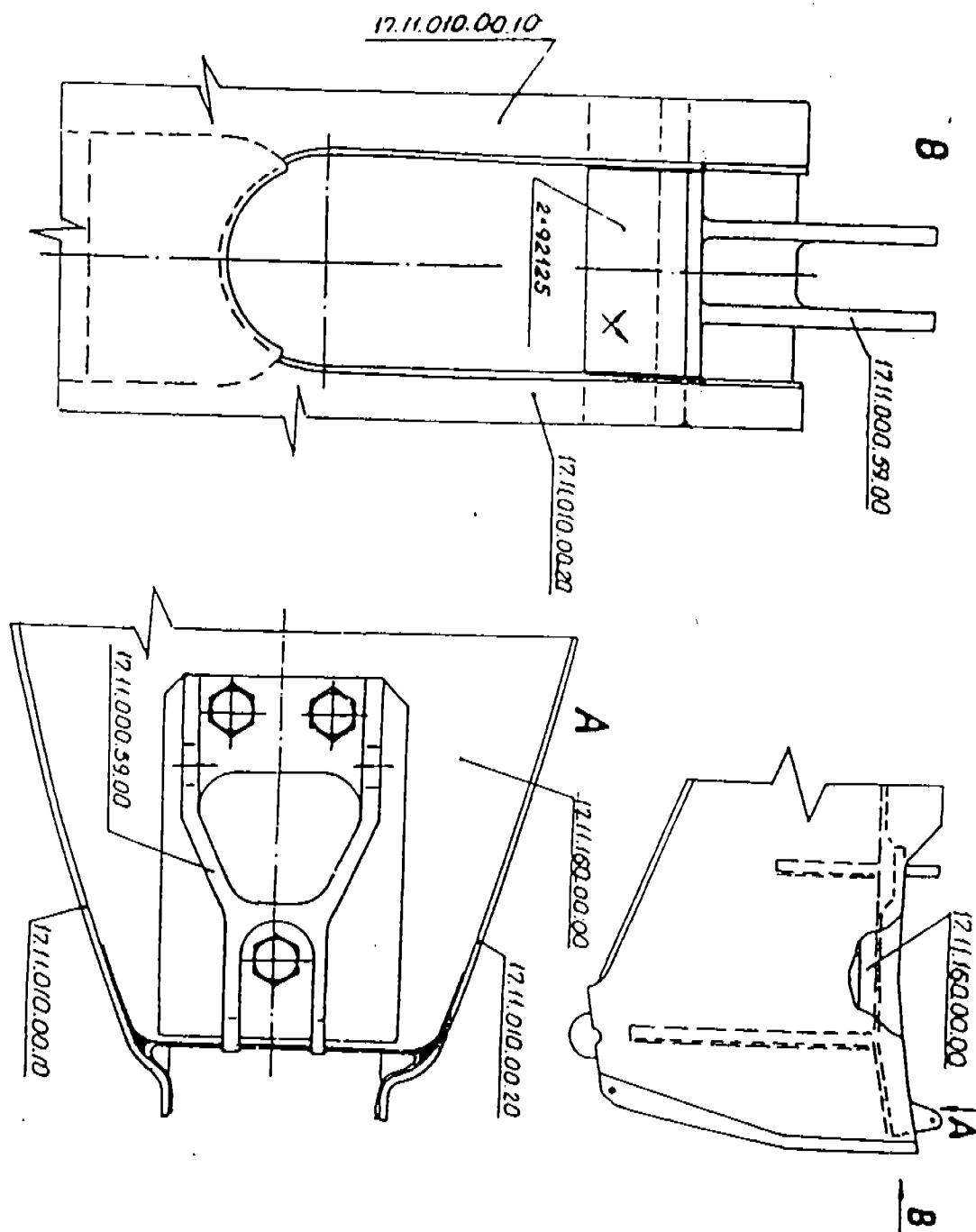
Term of performing technical inspection of adhesive-bonding joint and repair: 2 months after receiving the bulletin.



IV

Recording of work in maintenance documentation:

Record the performance of bulletin No. BO-17-02-16 in the Sailplane Log Book, chapter II.



Sketch No. 2



V

List of materials required to perform repair

Material /Q-ty

Manufacturer:

Agent:

1. Glass cloth:Interglas 92125 / 0,2 m²

CS-INTERGLAS AG
Benzstraße 14
Germany
www.cs-interglas.com
tel. + 49 (0)7305 955 - 416
fax: + 49 (0)7305 955 - 512

Lange + Ritter GmbH
Dieselstr. 25
D-70839 Gerlingen
Germany
www.lange-ritter.de
tel. (07156) 2006-0
fax (07156) 2006-6

Friebe Luftfahrt-Bedarf GmbH
Flughafen Neuostheim
68163 Mannheim
Germany
www.friebe-aviation.com
tel.: 0621-412408, 0621-414294
fax: 0621-416759

2. Epoxy resin:Epidian 53 with hardener
Z1 / 0,1kg

Z.CH. „Organika-Sarzyna” S.A
ul.Chemikówl
37- 310 Nowa Sarzyna
Poland
www.zch.sarzyna.pl
e-mail: pe@zch.sarzyna.pl
tel.(+48 17)2413231 w.5491
faks (+48 17)2411297

Z.CH. „Organika-Sarzyna” S.A
Dział Handlu i Marketingu
tel.(017) 241 32 31
w.5379; 5542; 5455
e-mail: pem@zch.sarzyna.pl

MGS 335 with hardener
335 / 0,1 kg

MGS Martin G. Scheufler
Kunstharzprodukte GmbH
Am Ostkai 21+22
D-70327 Stuttgart
Germany
www.mgs-online.com
e-mail:mgs@mgs-online.com
tel: +49 - 711 - 32 30 81
fax: +49 - 711 - 32 80 04 1

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D-70839 Gerlingen
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225 Airport Circle
Corona, California 92880
www.aircraftspruce.com
Email: info@aircraftspruce.com
Tel: 909-372-9555
Fax: 909-372-0555



3. Colloidal silica:

Aerosil[®], Cab-o-sil[®],
HDK[®]N20
/ 4 g

Wacker-Chemie GmbH
Headquarters
Hanns-Seidel-Platz 4
81737 München
Germany
www.wacker.com
tel.+49-89-62 79-01
fax.+49-89-62 79-17 70

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Email: info@aircraftspruce.com
Tel: 909-372-9555
Fax: 909-372-0555

Note:

Aerosil[®] is the registered trademark of Degussa Corporation.

Cab-o-sil[®] is the registered trademark of Cabot Corporation.

HDK[®]N20 is the registered trademark of Wacker-Chemie.