# STRUCTURES GENERAL — FIBREGLASS REPAIRS — ALTERNATE REPAIR MATERIALS

#### 1. PLANNING INFORMATION:

### A. Effectivity

- (1) Aircraft Affected
  - (a) **N22 Series** line sequence numbers 1 to 9, 11 to 29, 31, 33, 35, 37, 39 to 41, 43, 45, 47 to 59, 61, 63, 65 to 70, 82 to 88, 90 to 95, 97, 100, 102 to 114, 116, 118, 125,126, 131 to 134, 137, 138, 141, 143 to 170.
  - (b) **N24 Series** line sequence numbers 10, 30, 32, 34, 36, 38, 42, 44, 46, 60, 62, 64, 71 to 81, 89, 96, 98, 99, 101, 115, 117, 119 to 124, 127 to 130, 135, 136, 139, 140, 142.

#### B. Reason

This Service Bulletin publishes alternative materials used for fibreglass repairs. Operators have reported that materials listed in Chapter 51-20-00 of the Structural Repair Manual (SRM) may be difficult to procure.

### C. Description

Alternate repair materials are offered. Fibreglass cloth is now identified by an approved specification.

#### D. Compliance

(1) Compliance with this Service Bulletin is at the discretion of the Operator or Maintenance Provider.

### E. Approval

The repair detailed herein has been approved pursuant to Australian Civil Aviation Safety Regulation 21.095. GippsAero reference GAE11#2004.

### F. Manpower

The manpower required will change with each repair.

#### G. Material Price and Availability

Repair materials are locally sourced by the Operator or Maintenance Provider.

#### H. Tooling, Price and Availability

Standard workshop equipment.

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## I. Weight and Balance

Negligible effect on aircraft balance.

#### J. References

IPC - Illustrated Parts Catalogue

MM - Maintenance Manual

SRM - Structural Repair Manual

### K. Publication Affected

SRM - Structural Repair Manual

#### 2. ACCOMPLISHMENT INSTRUCTIONS

Read this section in conjunction with, and in lieu of, FIBREGLASS REPAIRS, SRM Chapter 51-20-00. An extract of the applicable SRM pages appear below with alternate repair materials or specifications identified in **bold**.

# WARNING \$

ALTERNATE ADHESIVES AND RESINS IDENTIFIED HERE MUST NOT BE USED FOR REPAIRS TO ENGINE NACELLE FAIRINGS. ALL RESIN AND FABRIC COMBINATIONS HAVE NOT BEEN TESTED FOR FIRE RESISTANCE.

3.	Typical	Repairs	(Ref F	igure	1)
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- A. Surface Repairs (Ref Table 1, Table 2 and Figure 1, Sht 1)
  - (1) ...
  - (2) ...

...

- (8) When the repair has cured, sand to the original contour and fill as required with a surfacing paste of either of the following formulas:
  - (a) ARALDITE AV123B 1 part by weight or volume and HARDENER HV953B 1 part by weight or volume or
  - (b) SCOTCHWELD 2216B 5 parts by weight and SCOTCHWELD 2216A 7 parts by weight

Cure the surfacing paste in accordance with the manufacturer's instructions.

#### NOTE

All fabrics must be finished in either Amino-silicone (AS1100) or metacrylate chromic chloride (Volan A).

Table 1 Approved	Repair	<b>Fabrics</b>
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Glass Fabric British	Designation <u>1</u> / US	Specification	Type	Normal Weight (oz/yd²) <u>1</u> /	Nominal Thickness (in) <u>1</u> /	Weave
	120	AMS-C-9084	III	3.0	0.004	Satin
P6/22	128	AMS-C-9084	IV	5.5	0.007	Plain
P6/33	128-150	AMS-C-9084	IV A	5.5	0.007	Plain
S2/22	181	AMS-C-9084	VIII	9.0	0.010	Satin

### Notes:

1/ Commercial designations, nominal weights and thicknesses are shown for information only and are not requirements. Commercial designations for a given type may vary with different suppliers.

## **Table 2 Approved Repair Laminating Resins**

Resin	Hardener	Resin/Hardener Mix Ratio (By Volume or Weight)
Araldite MY750, MY740, LY556 or LY553	Araldite HY951 or Araldite HY956	10:1 5:1
Shell Epon Resin 815 or 828	Shell Epi-Cure 3223 or 3234	5:1 10:1
H.B. Fuller EY3804A	H.B. Fuller EY3804B	100:66 (by weight)

#### 3. MATERIAL INFORMATION

A. Parts Required Per Aircraft

As required for each repair.

B. Parts Required for Modify Spares

Nil.

C. Parts Removed

Nil.

D. Special Tools and Equipment

Nil.

E. Superseded Special Tools

### 4. RECORDING ACTION

For repairs conducted in accordance with Chapter 51-20-00 and this Service Bulletin, record accomplishment in airframe log book.