Performance of Minor Infield Repairs of the Natural Composite MT-Propeller Blades during the Operation Time Between Overhaul Periods

Affected Propellers
All MT-, MTE- and MTV- Propellers with Natural Composite Blades

1. Background:
During the operation time between overhaul periods it is sometimes necessary to perform minor infield repairs of the natural composite MT-Propeller blades.

The repair defined in this SL32-2 is allowed to be performed by certified overhaul service centers only and can be approved by the service center on behalf of the manufacturer.

The extended areas described in this document increase the repair limitations from Service Letter 32 chapters

- 2.5 Trailing Edge Damage
- 2.6 Blade Surface Damage
- 2.7 Blade Tip Damage

2. Extended repair limits
The extension of repair limits consists of three areas A to C which are shown in figure 1 and defined as follows:

- **Area A:**
  Parallel to the trailing edge, a width of 0.75 in (19mm), 3 in (76mm) to 8 in (203mm) from the blade ferrule
- **Area B:**
  Parallel to the trailing edge, a width of 1 in (25mm), 8 in (203mm) from the blade ferrule to the tip of the blade
- **Area C:**
  A width of 2 in (51mm) parallel to the blade tip, excluding the area of the erosion sheath.

The Service Letter 32 defines the type and repair methods of damages which are also applicable for this document. This Service Letter 32-2 extends the damage dimension limitations from Service letter 32 parallel to the blade edge acc. to the areas A to C, see figure 1.

A repair within the extended repair areas can also be performed for multiple damages which have a minimum distance of 6 in (152mm) to each other.
Figure 1: Areas of extended repairs performed by certified overhaul service centers
List of recommended Materials:

**Blade Root-Ferrule Seal**
Silicone Sealant  RTV 109 General Electric  or similar

**Epoxy Resin Materials:**
Quick Epoxy:  Devcon 14210 (5 Minute Epoxy)  or similar
Loctite 0151 Epoxy Patch  or similar (Loctite Hysol 3430)
Scheufler: Resin 285 Hardener 500  or similar
Fuller: Resin A20  Hardener B20  (original MT-System)

**Erosion Sheath (V2A and Nickel) Bonding Epoxy:**
EA-9309NA QT System Part A:  Epoxy Adhesive; Hysol / Henkel
EA-9309NA QT System Part B:  Epoxy Adhesive Hysol / Henkel

EA 9359.3 QT System Part A:  Epoxy Adhesive; Hysol / Henkel
EA 9359.3 QT System Part B:  Epoxy Adhesive Hysol / Henkel

**Fiber Glass Material**
Fiber Glass Cloth:  Interglas Type 92110 Fiber Glass (twill 2/2  163g/m²) or similar

**Filler Material:**
Reladur 481 PU spraying filler, gray 48PU-7750 or similar
Feycopur 610 PU Priming color
Relonit priming, color grey 61-AC-9000 or similar