# TECHNISCHE INFORMATION TI-18 SERVICE LETTER SL-18

# I. TECHNICAL DETAILS

1.1 Aircraft Affected

#### Viking T69A

(civil type designation Twin II Acro, as operated under military registration in the UK)

#### 1.2 Subject

Information on replacement procedure for the canopy spigots (Schlitzbolzen 103B-2596).

#### 1.3 Reason

Wear has been observed in the canopy spigots, i.e. the bolts on the left side of each canopy seal on the fuselage which hold down the canopy when locked.

This wear increases the size of the oval shaped opening in the bolt, resulting into detoriating fit of the locked canopy and ultimately weakening of the spigot against holding the canopy closed under flight loads.

To provide guidance about which damages must be repaired and which damages are acceptable for flight (i.e. which defects or damages might be deferred to continue flight operations).

Repair of spigots with unacceptable large wear has to be done by replacing the spigot, which is described in this document.

#### 1.4 General Guidance

Usual good practices for repairing composite structures are needed for proper spigot replacement, i.e. using procedures for a clean working area, care when mixing resin systems, curing processes, etc. as described in the repair manual and other technical information.

Also regarding safety measures like eye and skin protection, etc. need to be applied.

<b>FASA AP 161</b> 25 10 2022	Fiberglas-Technik Rudolf Lindner EASA AP.161	Technische Information TI-18 Service Letter SL-18	Grob Viking T69A	Page 2 of 5 Edition 25.10.2022
-------------------------------	--	--	---------------------	--------------------------------------

#### 1.5 Repair procedure to replace the canopy spigots

#### Locate cover on the canopy frame



• by use of sanding paper or a sanding machine remove the paint on the inner canopy frame at the damaged spigot until the contour of the cover plate becomes visible

Open the cover at the spigot



- by use of a chisel or strong knife loosen the cover out of the bond joint
- if the cover becomes damaged, replacement covers may be ordered from LTB Lindner (Fiberglas-Technik Rudolf Lindner GmbH & Co.KG)

Fiberglas-Technik Rudolf Lindner EASA AP.161	Technische Information TI-18 Service Letter SL-18	Grob Viking T69A	Page 3 of 5 Edition 25.10.2022
--	--	---------------------	--------------------------------------

#### Remove the glass layers on the spigot plate



- the spigot is glued to the fuselage shell and additional layers of glass fibre cloth have been . laminated over the base plate of the spigot
- remove the glass layers at the outer edges of the base plate by sanding or by use of a hand tool . (e.g. Dremel) machine



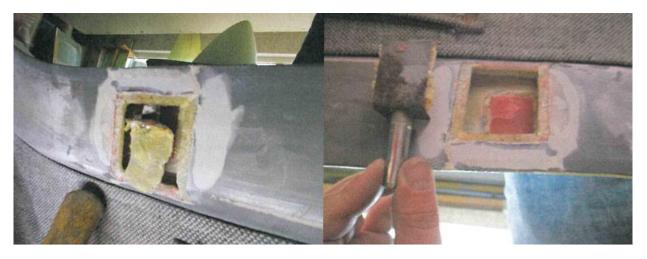
Remove the old spigot

.

after removal of the glass layers around the edges of the baseplate, remove the old spigot by use of a hammer from the top by breaking free the bond joint to the fuselage shell

Fiberglas-Technik Rudolf Lindner <b>EASA AP.161</b>	Technische Information TI-18 Service Letter SL-18	Grob Viking T69A	Page 4 of 5 Edition 25.10.2022
---	--	---------------------	--------------------------------------

### Replacement of the spigot



- remove old spigot and clean bonding area by careful sanding, taking care not to remove the outer corner of the old bonding resin
- bond new spigot into the contour of the old bond joint using resin with cotton flocks
- after hardening, check proper ft of the canopy and full locking



### Final working steps of spigot replacement

- if fit / locking of canopy is not proper, remove new spigot using same procedure and test-fit again with regarding corrections
- laminate 2 layers of glass fabric type 92125 over the spigot base plate with min. 20 mm overlap to the fuselage shell
- close cover by bonding into the opening using resin with cotton flocks
- cure all resin bonding / laminate repairs
- fill, sand and paint over cover in the canopy frame

Fiberglas-Technik Rudolf Lindner EASA AP.161	Technische Information TI-18 Service Letter SL-18	Grob Viking T69A	Page 5 of 5 Edition 25.10.2022
--	--	---------------------	--------------------------------------

## II. REMARKS

The information within this document does not supersede information or limitations given in the aircraft manuals (flight / maintenance / repair manuals).

This edition dated 25.10.2022 replaces the original edition dated 04.07.2019 due to renumbering this Service Letter from number SL-G014 to SL-18. The technical content was not changed in this re-edition.

For questions and assistance please contact:

Fiberglas-Technik Rudolf Lindner GmbH & Co.KG Tel: +49 7353 2243 Fax.: +49 7353 3096 E-Mail: <u>info@LTB-Lindner.com</u> <u>www.LTB-Lindner.com</u>

Walpertshofen, den 25.10.2022

Helmut Lindner