

Chapter 53

Fuselage

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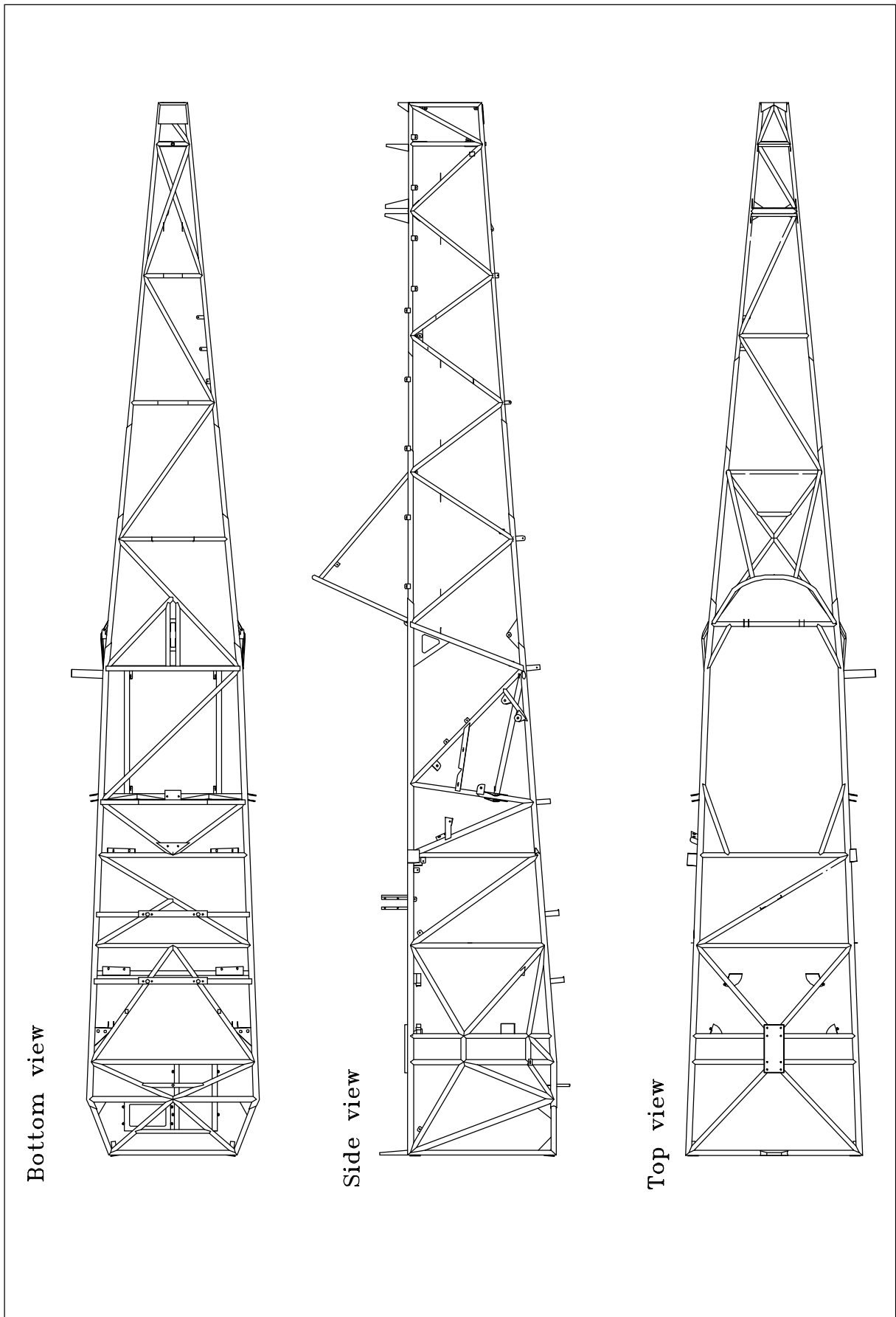
GENERAL

The fuselage structure consists of a TIG-welded steel tube construction integrating the wing and empennage connections as well as the seat (refer to Figure 1).

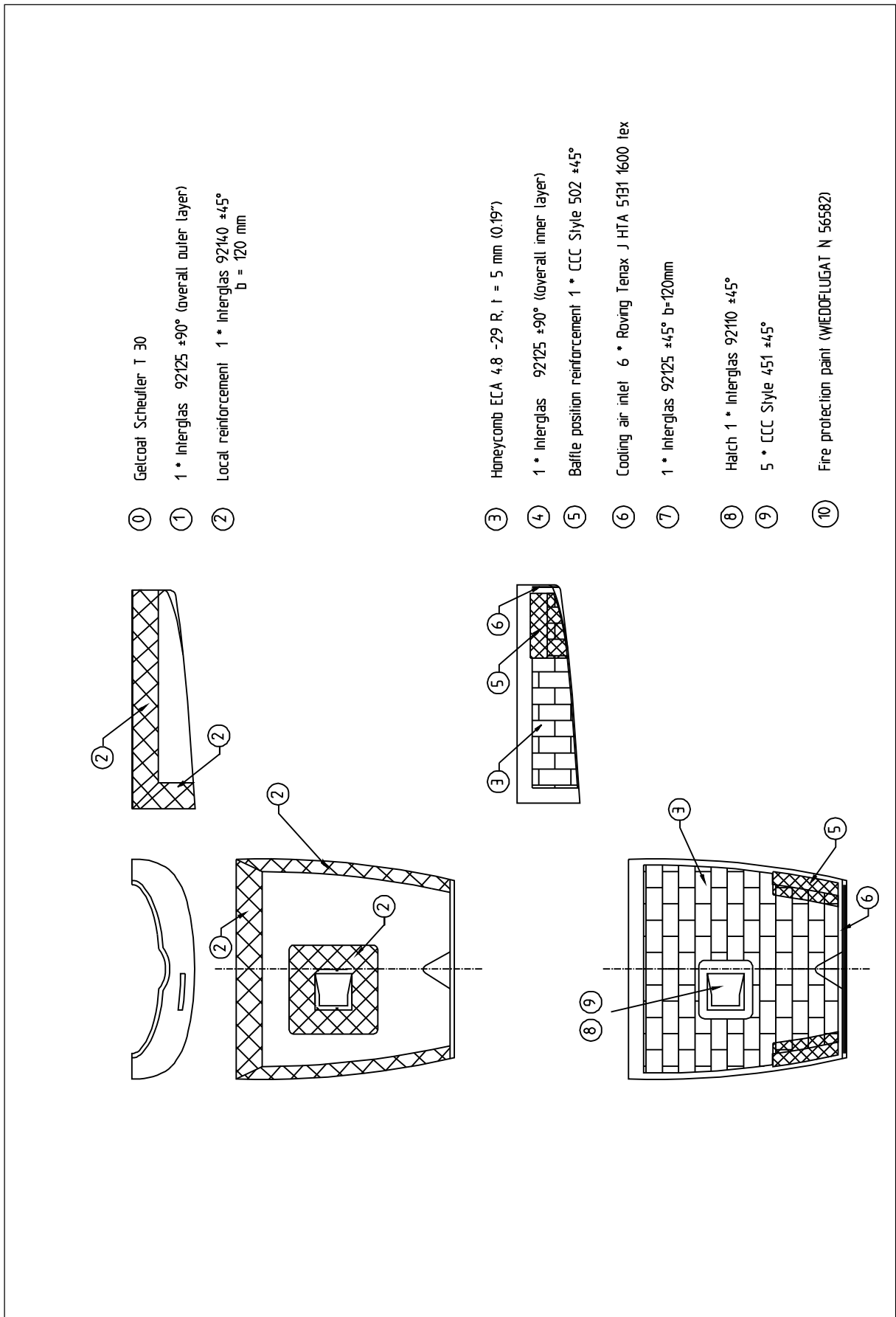
The particular areas of the fuselage are covered with different materials (also refer to Chapter 51-00-01 "Access Panel Identification"): Both halves of the engine cowling consist of glass fibre laminate and honeycomb. The upper part of the fuselage (main fuselage cover) consists of an aramid laminate. The lower front part of the fuselage behind the fire wall and the sides below the wing are faired with aluminium panels. The lower rear part of the fuselage is covered with fabric. The one-piece canopy frame is built of carbon fibre laminate and rovings. The window portion is made of acrylic glass. The layer sequences of the engine cowlings, the main fuselage cover and the tail fairing are shown in Figures 2-5 (Figure 2, Position 5 is added from Serial No. 14; Figure 4, Position 12 is added from Serial No. 29).

All composite parts, as protection against moisture and UV radiation, are coated with an unsaturated polyester gel-coat, an acrylic filler and finally with an acrylic paint.

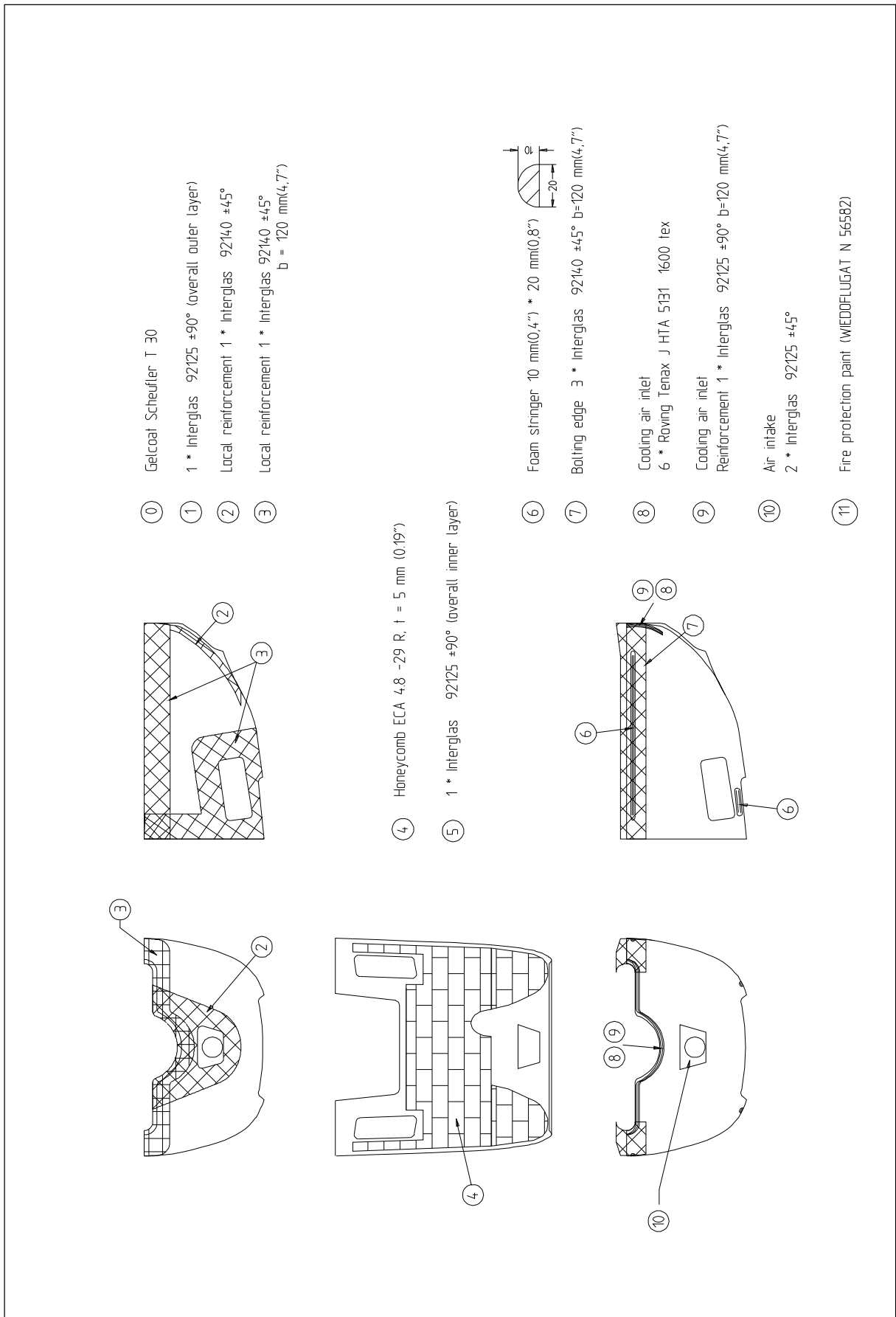
For repair of composite parts, aluminium and steel components refer to Chapter 51. The repair of fabric has to be executed in accordance to the FAA AC 43.13-1A.



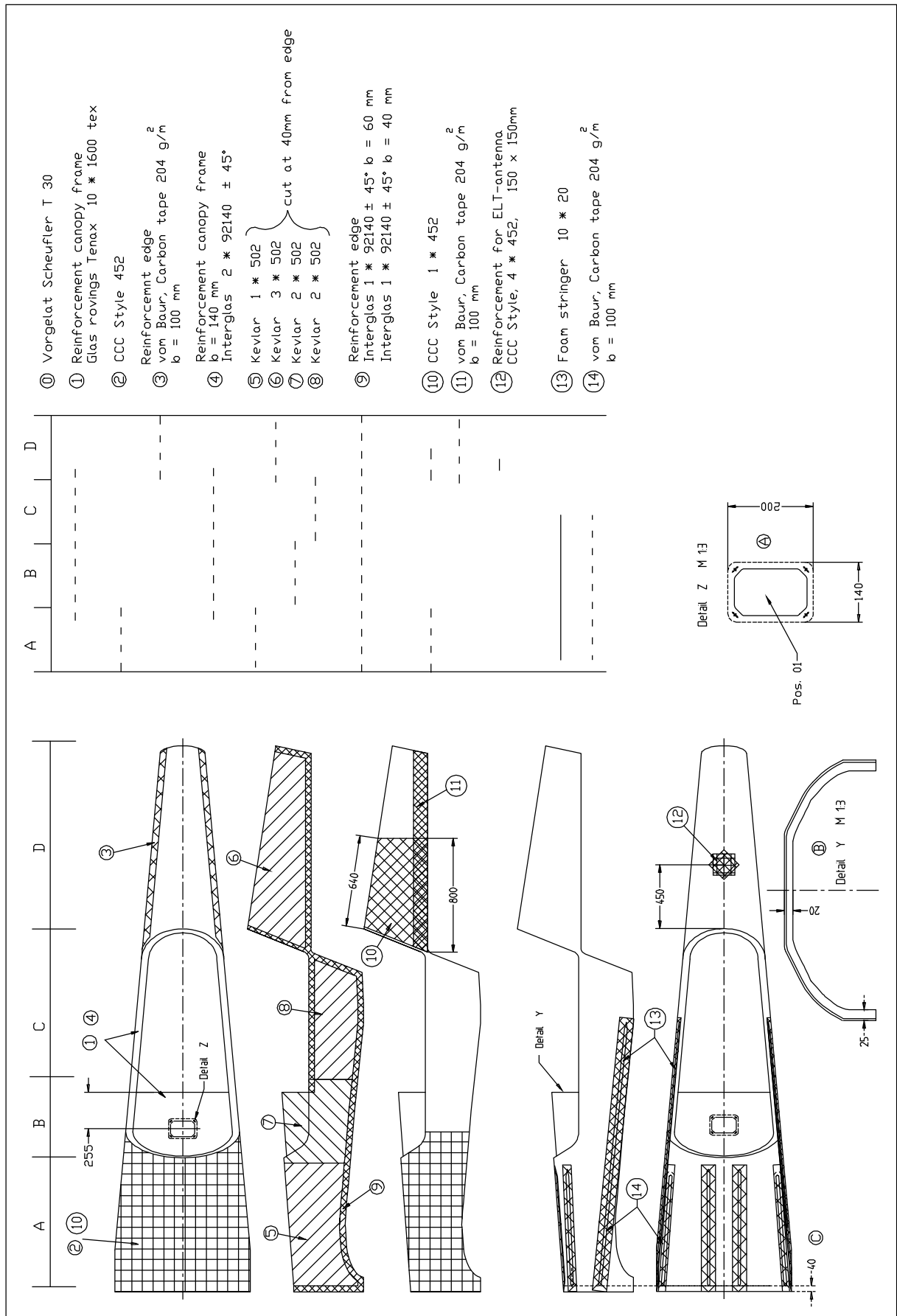
*Fuselage Steel Tube Design
Figure 1*



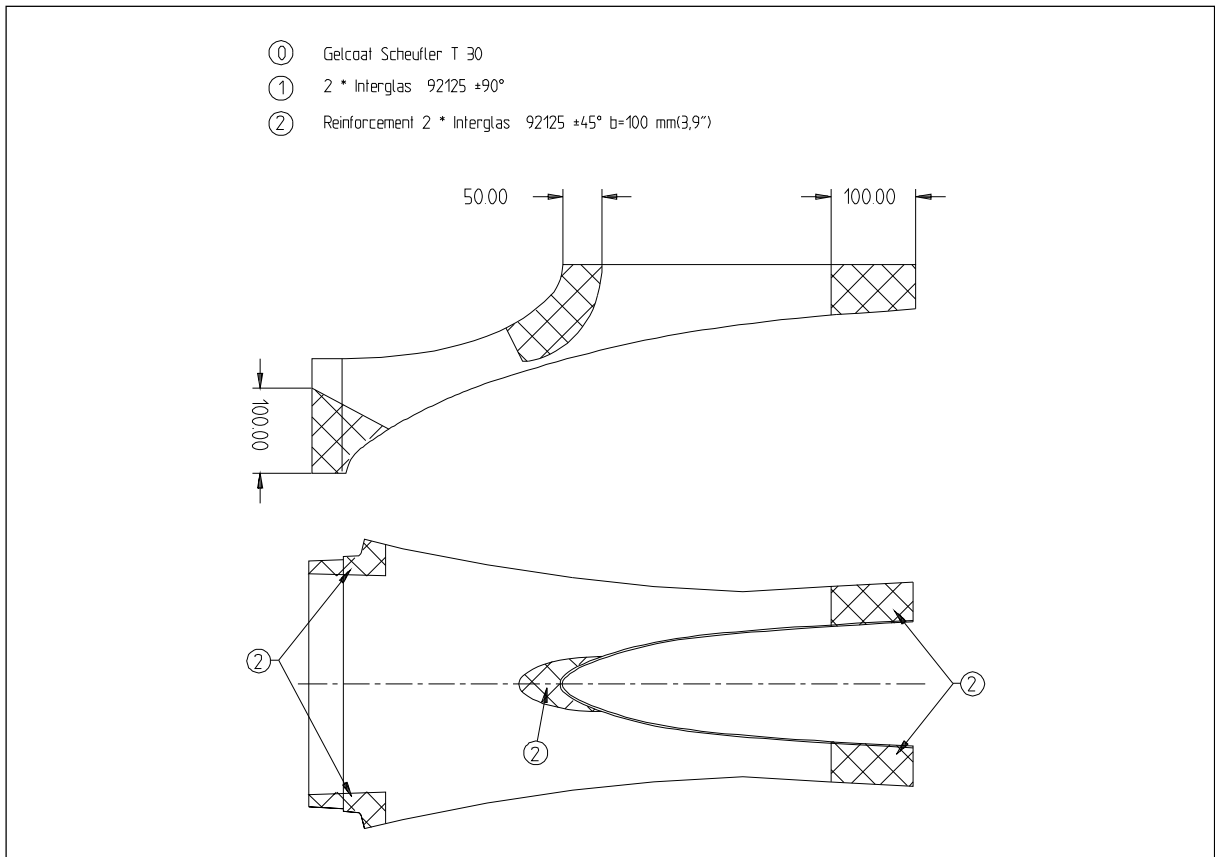
*Layer Sequence Top Half of the Engine Cowling
 Figure 2*



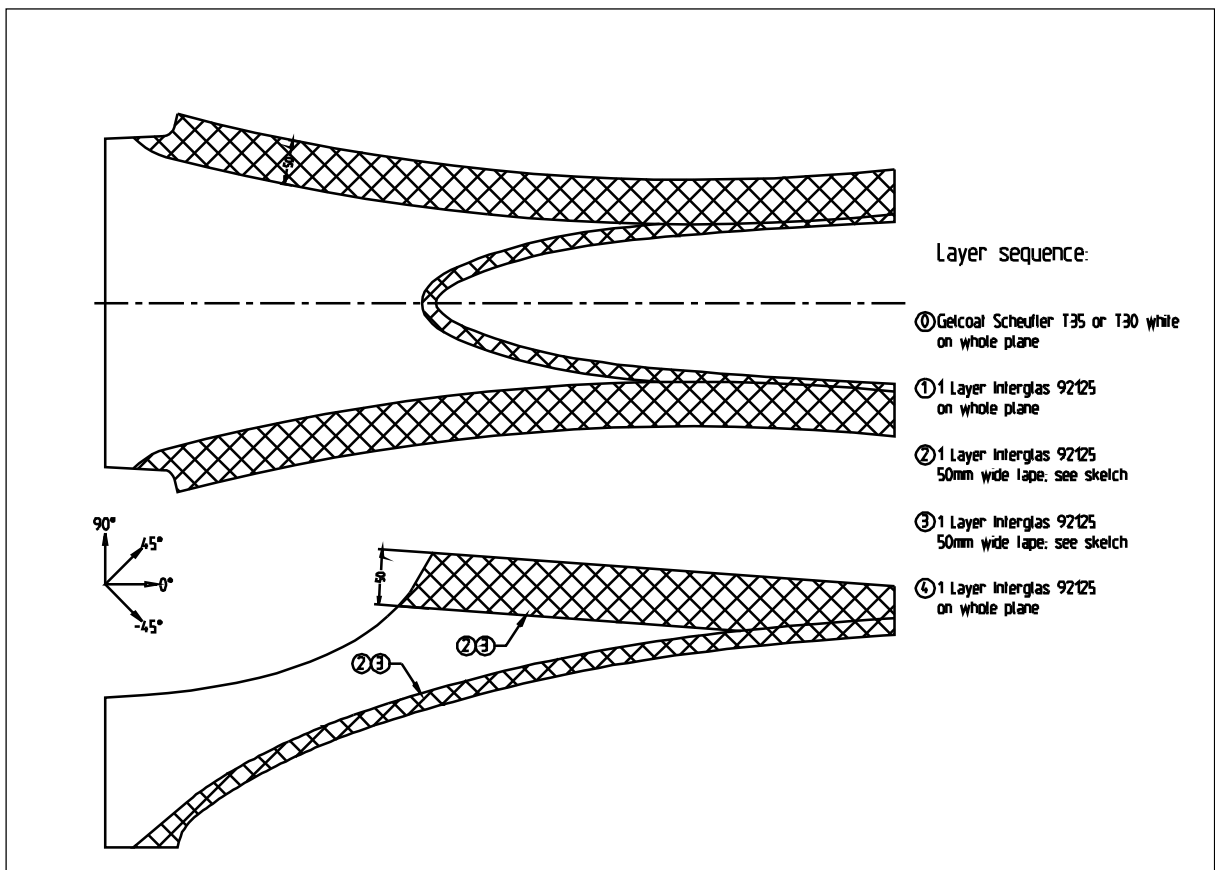
Layer Sequence Bottom Half of the Engine Cowling
Figure 3



Layer Sequence Main Fuselage Cover
 Figure 4



*Layer Sequence Tail Fairing up to Ser. No. 29
 Figure 5, Sheet 1*



*Layer Sequence Tail Fairing from Ser. No. 30
 Figure 5, Sheet 2*

53-01-00

MAINTENANCE PRACTICES

53-01-01

Canopy

Removal/Installation

- 1 Open canopy.

CAUTION

Support the canopy by hand before disconnecting the opening limiter strap.

- 2 Remove the attachment bolt of the opening limiter strap.
- 3 Push canopy to front and remove.
- 4 Install in reverse sequence of removal.