
Usable volume under fairing and SPELDA

Annex 6

Usable volume

The free volume available to the payload, known as the "static volume", is shown in the figures A6-5 to A6-11.

This volume constitutes the limits that the static dimensions of the spacecraft, including manufacturing tolerance, thermal protection installation, appendices..., may not exceed.

It has been established having regard to the frequency requirements of paragraph 4.5.3. Allowance has been made for the flexibility of SPELDA, fairing, SYLDA and of the spacecraft.

The compatibility of the critical dimensions with the usable volume will be studied in greater depth by coupled load analysis, based on detailed informations provided by the User.

In the present document, this volume has been increased up to a diameter of 3.75 m in the fairing cylinder, except in local areas. This dimension represents the ultimate boundary that the spacecraft must not exceed. A demonstration must be established by accurate measurement for any part of the spacecraft in the vicinity of the envelope.



Fig. A6.1 – Short SPELDA



Fig. A6.2 – Mini SPELDA



Fig. A6.3 – Payload fairing – External view



Fig. A6.4 – Payload fairing – Internal view

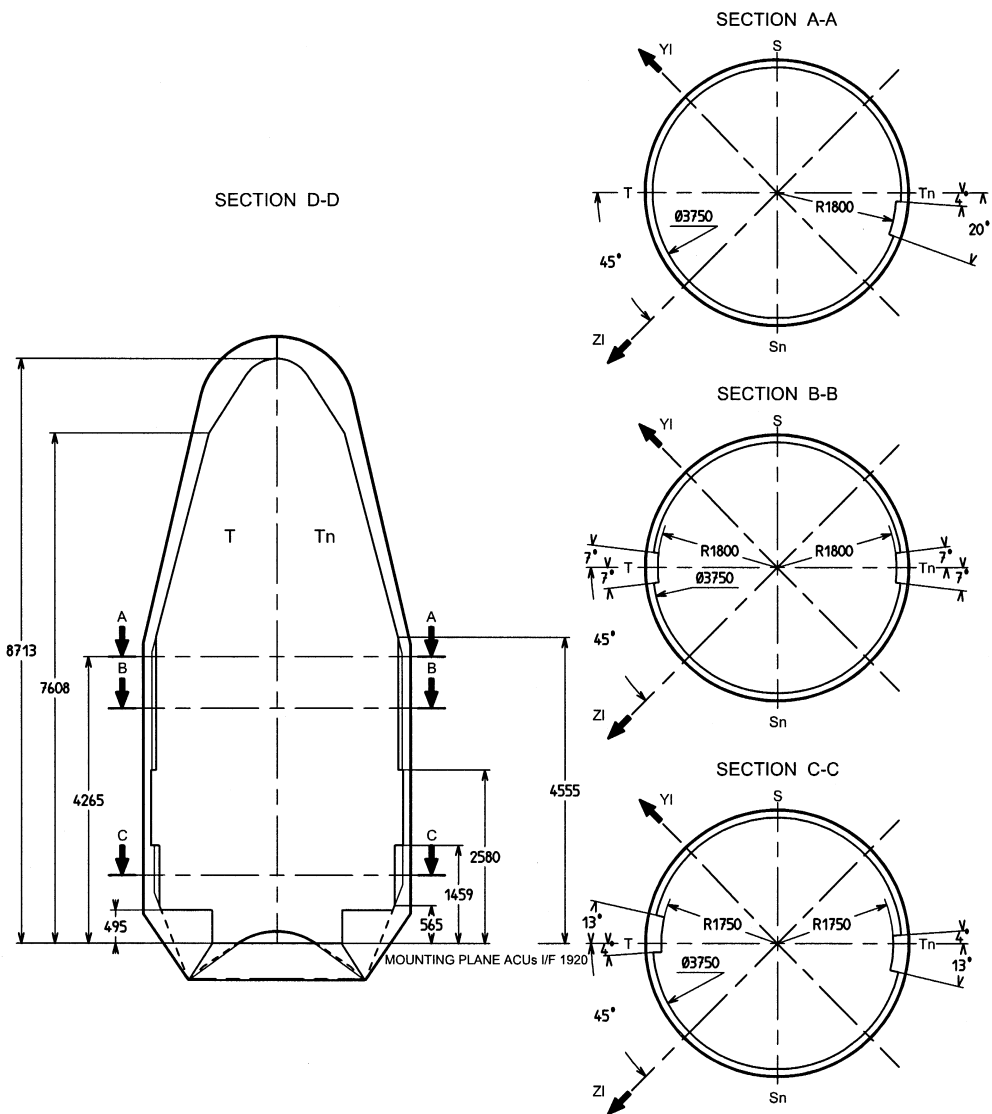
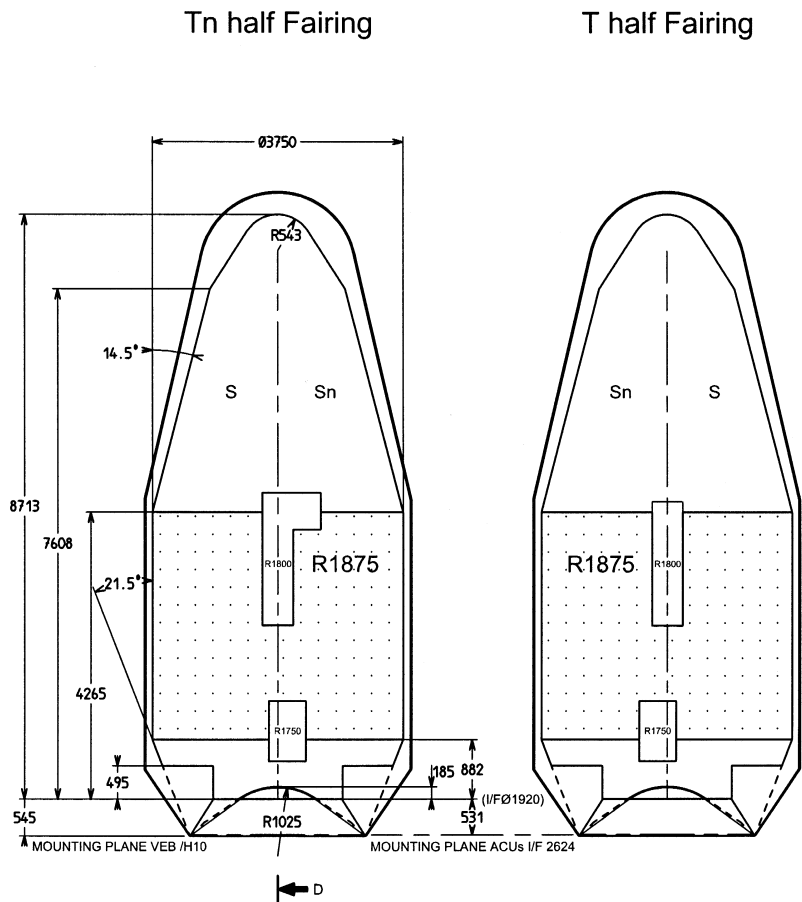


Fig. A6.5 – Usable volume – Single launch – Interface Ø 1920 fairing type 01



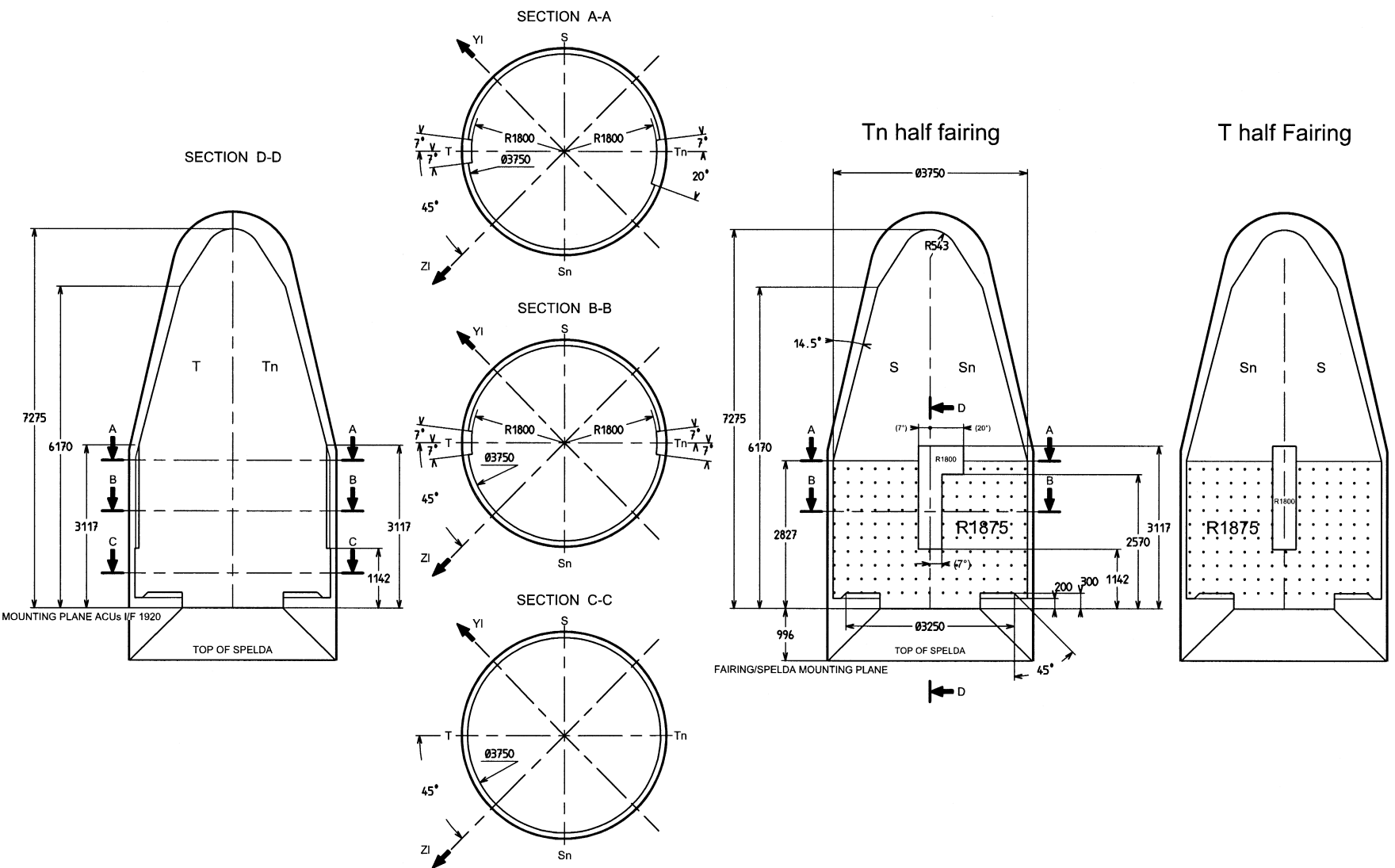


Fig. A6.7 – Usable volume – Dual launch – Upper position Interface \emptyset 1920 fairing type 01



DUAL LAUNCH - INNER POSITION Interface Ø1920

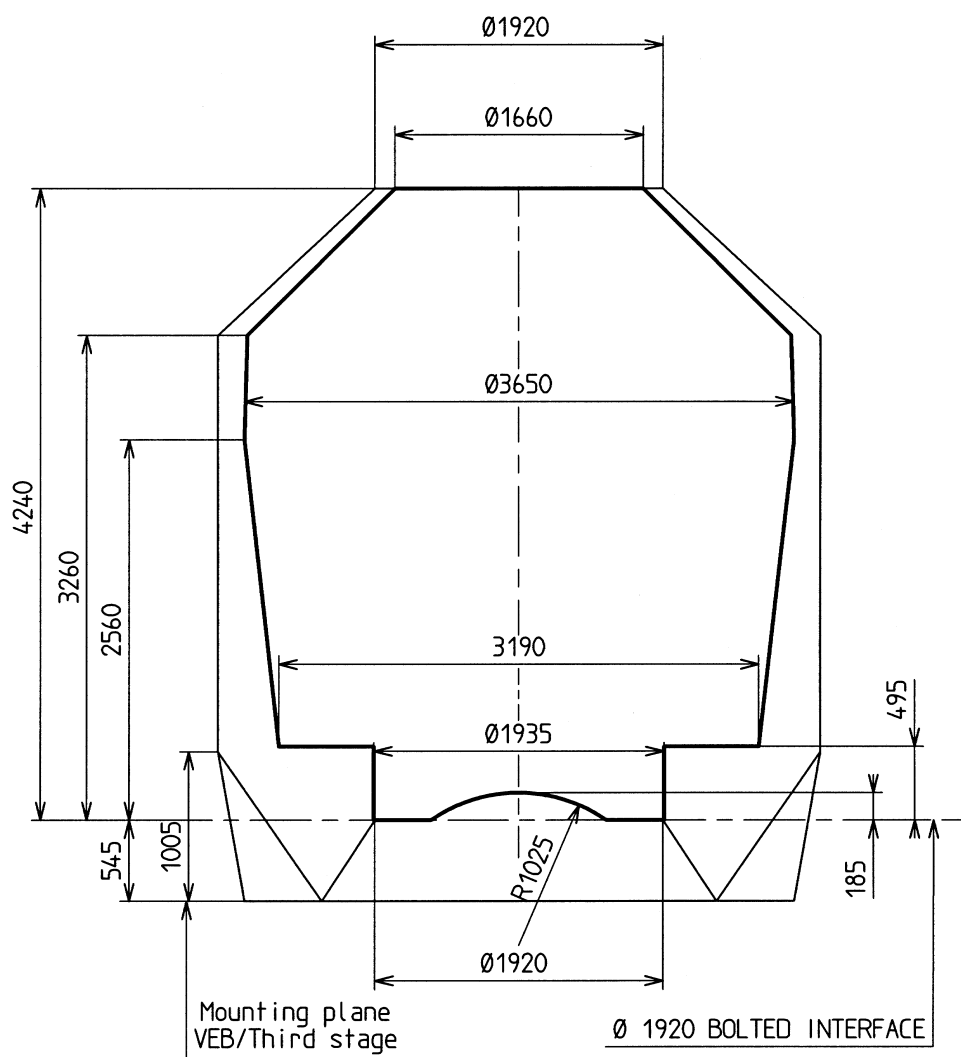


Fig. A6.9 – Usable volume beneath short SPELDA (type 10)

DUAL LAUNCH - INNER POSITION

Interface Ø1920

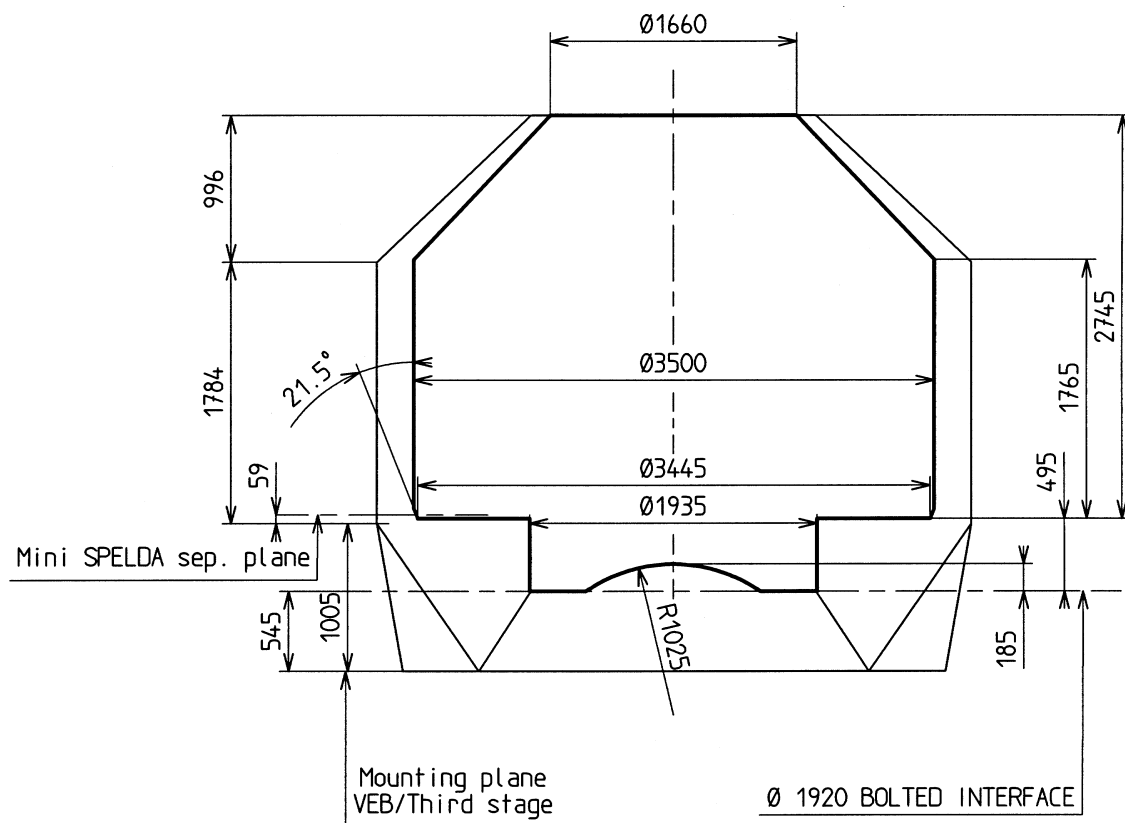


Fig. A6.10 – Usable volume beneath mini SPELDA (type 30)

