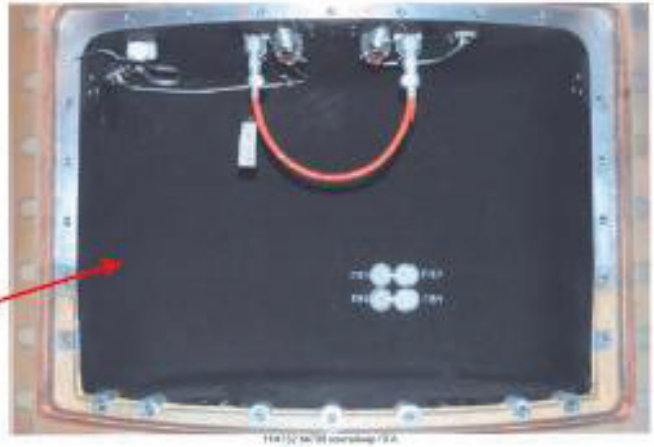
Status of Soyuz Anomalies

Over-pressurization during ground testing (30S)

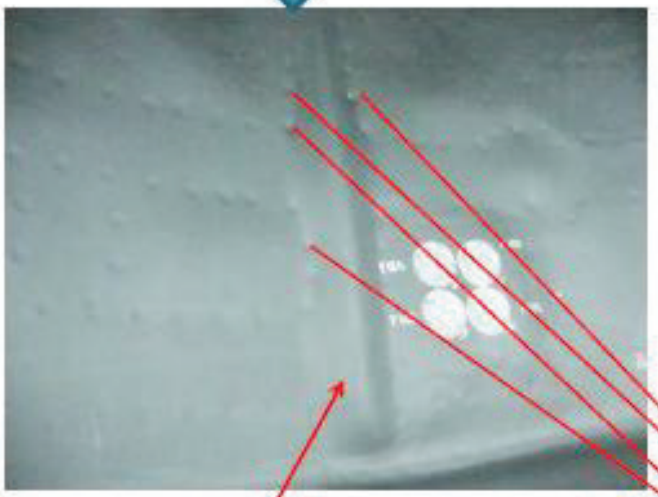
- ***Soyuz 30S* - The Soyuz vehicle #704, slated for flight 30S (TMA-04M), had a problem during ground testing, prior to its shipment to Baikonur.**
  - During pressure testing of the descent module and the pressurized section of the propulsion module, the vehicle was over pressurized and as a result it caused a leak in the area housing the hydrogen peroxide system for the thrusters that are used during descent and landing *(see next page)*
- **Status: A Russian Commission was formed to investigate the cause of the over-pressurization and ensure it doesn't happen again.**
  - Soyuz vehicle #704 was suspended from flight pending completion of further analysis
  - Soyuz vehicle #705, previously planned for flight 31S, is being accelerated for use on flight 30S
  - This results in a 6-week delay to the 30S launch
  - The crew of Soyuz 28S will remain on orbit another six weeks for a total of 168 days
  - Other Soyuz and Progress flights were replanned for the remainder of 2012

Deformation and local failure SHELL CONTAINER ma lander spacecraft "
TMA-04M» № 704

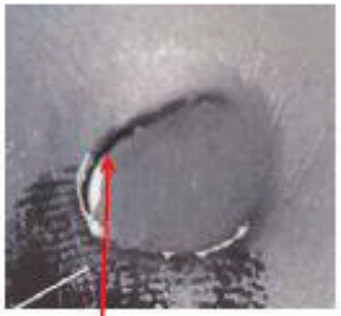
Container for installation pnevmogidroagregata (PGA) storage of hydrogen peroxide



In the "Soyuz TMA-04M» № 704



Corrugations on the outside of the container PGA



Cracks in the shell of the container on the PGA points to the power set of welding