

## **CYPRES** maintenance steps:

To complete the maintenance process on a CYPRES will take usually 10 complete working days. It had been disassembled and after the extraction of the memory each necessary and important dimension was measured.

Every result is compared to:

- · the corresponding measurement of your unit at it's manufacturing date
- and / or last maintenance
- the average of all the units of the same age.

An individual judgment of each dimension ruled the decision if your unit is rated "good" or if it has to be repaired or exchanged.

This system that we use leads to prophylactic repairs. (not broken yet but maybe in the future) To find out how your unit performs under stress the unit was submitted to extreme cold and extreme heat while being permanently under investigation and monitored.

Additionally it undergoes a number of flight and jump scenarios in our vacuum chambers. Normal scenarios as well as extreme ones.

The following points are addressed:

- all wear and tear is taken care of
- all necessary repairs will be done
- all applicable hard and software will be updated
- all applicable improvements will be installed
- all applicable adjustments for varying environmental conditions will be done.

To explain this point: a design can only be done to the circumstances at the time of the designing. Later, environmental conditions can change or new circumstances can turn up. (for example the invention of mobile phones) In case the device can not cope with the new situation, it could be disastrous.

During the existence of the CYPRES we already had to execute such adjustment on two occasions.

The following subjects are also investigated overhauled and re calibrated:

- temperature stability
- precision of pressure
- precision of altitude
- capability to fire
- functionality of the cutter
- shielding against radio waves and electrostatics
- waterproofness of all components and cables
- condition of the measurement and analysis system
- if necessary, we will replace the screws and O-rings for the waterproofness, the airbreathing filter and the power-supply.

Also it might very well be, that parts and modules will be exchanged.

Even the entire cutter or the complete measurement system or the entire electronics, if we find it appropriate.

After this service the CYPRES is now completely back on track for the next interval and should be as reliable as all CYPRES units that we manufactured since the 10th of January 1991.

There are more than 230.000 devices in the field and in excess of 154 Million jumps have been done with a CYPRES.

We know that this track record sounds unbelievable but it is the truth. One big reason for the fantastic security level that CYPRES provides to it's owner is our ability to repair, adjust, update and improve your unit during maintenance.