



CYPRES

The 4 and 8 year maintenance

When does the CYPRES need to be maintained?

A CYPRES needs the factory maintenance 4 years and 8 years after the date of production (e.g. the unit is produced 08/03: 1st maintenance is due 08/07, 2nd maintenance is due 08/11). The total lifetime for the original CYPRES (also known as CYPRES-1) is 12 years + max. 3 months, so the units do not need a 3rd maintenance. The total lifetime for CYPRES-2 was extended to 12 years + max. 6 months.

To avoid any inconvenience, there is a leeway of plus/minus three months for CYPRES-1 and plus/minus 6 months for CYPRES-2 in which the maintenance can be performed. This means that the maintenance for a CYPRES-1 manufactured in 08/03 can be performed in 05/07 at the earliest and 11/07 at the latest. Should the maintenance window be missed, we are able to perform it at a later date. However, returning a CYPRES for maintenance at a date later than the due date has no advantages. The subsequent maintenance will still be due at a four year interval from date of manufacture. (i.e. if a CYPRES-1 manufactured in 08/03 is not returned for its maintenance until 08/09 - the subsequent maintenance will still be due in 08/11).

Why is the CYPRES maintenance necessary?

The CYPRES is a very compact and sophisticated electronic device, which - during a 4 year time period - was probably submitted to many possible mechanical and thermal stresses. It is a possibility that the CYPRES had been left in the trunk of a car for days, the rig lay in the sun when packing, a landing was not so good and/or the unit may have been subjected to great temperature differences if jumping in cold areas. As with other rig components, CYPRES performs its task on every jump - and not only if an activation occurs. A possible activation is the end of a continuous work process. To ensure that the unit performs this work - even after a long period of time - as precisely as a new unit does, it needs a thorough check periodically. This is why the maintenance is necessary.

Does it make sense to use an AAD without maintaining it?

Why can an electronic unit fail? It is obvious that moving parts such as in engines or canopies wear and tear, but also non-moving parts are subject to degradation. For instance, televisions and radios also break down although they do not have any internal moving parts. One of the reasons is the chemical compound in some of the components. This is the result of aging. Besides time, temperature variation is one important criteria that influences electronic components. The check and correction of these proceedings are an important task of the maintenance.

A serious maintenance cannot only be a check that the AAD functions at the time of investigation. It has to be a procedure that allows a prediction FOR THE FUTURE. A maintenance unit may not be shipped back to its owner if there is not a good confidence

level that it will do its job properly for the next usage period. If that requires repair, repair has to be done. If that means replacement of parts, replacement of parts has to be done. If updates are possible, updates will be performed.

So, the CYPRES maintenance is a preventive measure and a tool to maintain the reliability level.

How long does the maintenance take?

We usually need 14 working days for civilian units for all the maintenance test procedures to be completed. Military units maintenance usually takes a little longer. Sometimes (more often at the second four years check) additional work is necessary and this, unfortunately, may extend this time frame. Whenever work has to be performed on a unit, tests are necessary to ensure that the work was successful and that it had no negative influences on other areas. These tests sometimes take days (i.e. temperature tests) and definitely cannot be shortened. Nevertheless, the price always remains the same.

Will the battery be replaced?

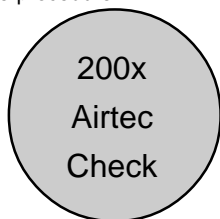
The CYPRES-1 battery will be replaced if its life time is up, or if it will end before the next repack cycle. The CYPRES-2 battery is longer lasting and is checked and replaced if needed during four and eight year maintenance at no charge.

If a new replaceable field cutter is desired, is this included in the maintenance charge?

No, this will be charged in addition to the maintenance cost.

How is the maintenance completion noted on the unit?

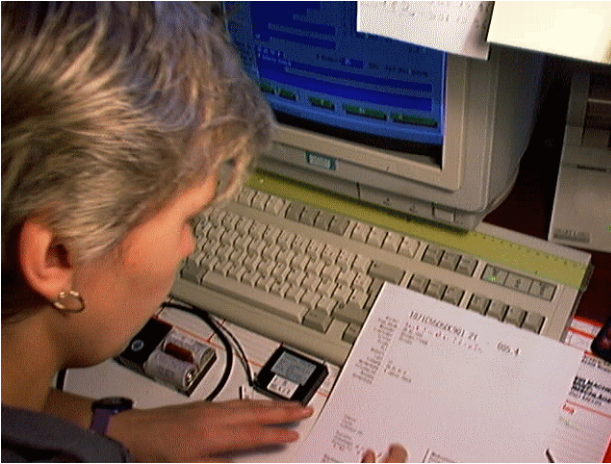
For CYPRES-1, a small round silver seal on the left side of the unit signifies successful completion of the maintenance procedure.



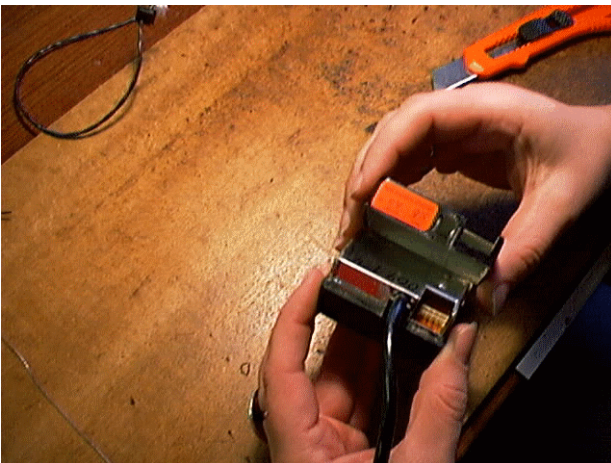
For CYPRES-2, the seal is placed on the cable side of the unit.

In detail, what is performed on the maintenance?

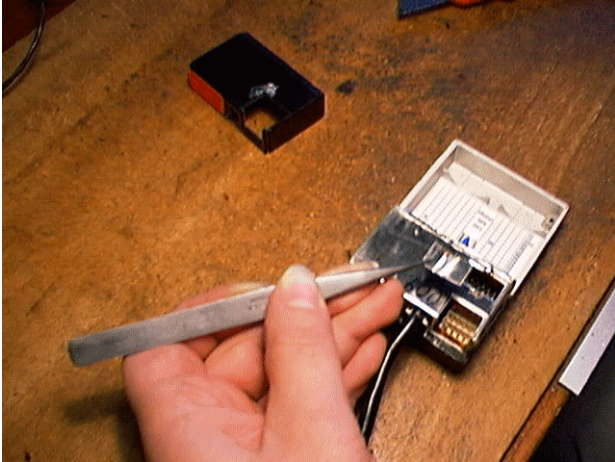
When we receive a unit for its maintenance, its details are first recorded on our data base. All relevant data - such as serial number, current owner, reason of returning, etc. - is entered. With all units, the complete history is stored on this data base.



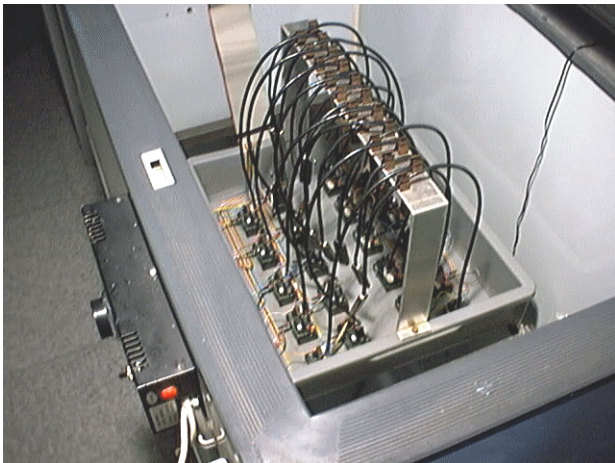
All cables are visually and electrically inspected for wear or damage. The next step is to open the casing. From here the unit runs through the individual stations.



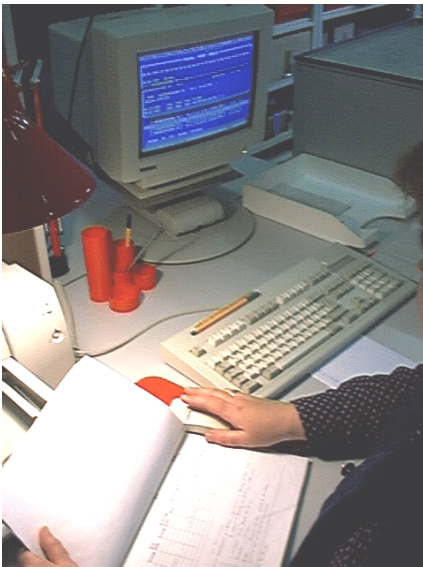
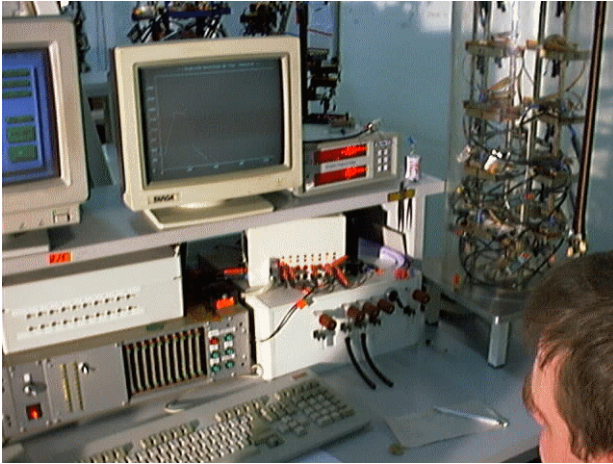
The plastic processing unit case is split apart and the internal metallic electromagnetic shielding unsoldered and removed.



If updates (technical improvements) are applicable on the unit, they are automatically performed. Every unit is subjected to extreme heat and cold conditions in climatic chambers.



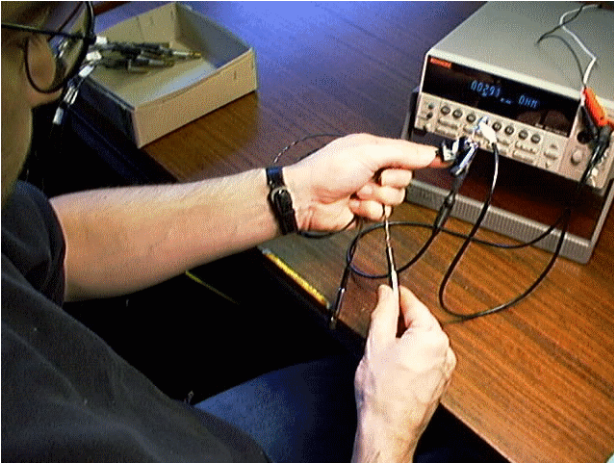
During this, all functions and power consumptions are tested and measured under many possible conditions. A great number of simulated test flights are performed, where the unit must NOT activate. Also, the unit is subjected to simulated conditions which cause it to activated, thus testing the activation programming and data (electronic cycle, precise duration and magnitude of activation impulse).



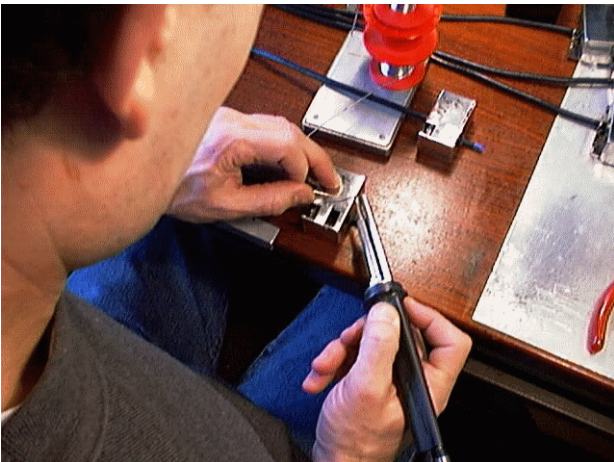
The technical data is compared with that from the original production phase. Any deviations or discrepancies are analysed and appropriate action taken.

Additionally, the data is compared with data from other units from the same manufacturing period. This is the reason why we request the CYPRES units to be returned for maintenance at the due date - plus or minus the 3 or 6 month leeway.

The cutters are also comprehensively checked - both visually and electronically. The plastic slip which the loop is routed through is checked under the microscope.



Once the unit goes through all tests successfully, it is re-assembled. When this is done, the unit goes through the testing procedure again to ensure that the rebuilding of the unit had no influence on the unit's function.



Where to ship the CYPRES for maintenance / service?

Should your CYPRES require maintenance / service and you are located in the **USA, Canada, South America and other Western Hemisphere countries** please send it to our service center in the USA:

SSK Industries, Inc.

1008 Monroe Road

Lebanon, OH 45036

USA

Tel: ++1 513 934 3201

Fax: ++1 513 934 3208

For all other countries:

Please send your CYPRES to your **local dealer**. If you don't know who that is please contact us and we will be glad to provide you with the address.



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