

# Smoke Jumper **CYPRES 2**User's Guide

This English user's guide is the original user's guide. It will not be further processed. The actual version of the manual can be downloaded at https://military.cypres.aero/

The latest revision is applicable for all herein mentioned CYPRES 2 models only and replaces and supercedes all previous applicable revisions\*. See https://dl.cypres.aero/military to verify / obtain the latest revision. Subject to change without notice. Smoke Jumper CYPRES 2 User Guide as revised 01 / 2024 Art.No. 991014.

\*If your CYPRES does not have the latest upgrades / updates installed it is possible that your unit does not have all options available, which are stated in the newest English user's guide.



# Smoke Jumper CYPRES 2 User's Guide

- english version -



Congratulations on your choice of CYPRES, the safest and most accurate AAD currently available. Like most skydivers, you probably assume you will always have time to deploy your reserve canopy yourself, and that situations requiring the use of an automatic activation device always happen to others. We do hope you will never have such trouble, and that your CYPRES will never have to try to save your life.

Should CYPRES ever decide to cut your reserve closing loop, it will most likely happen at a moment which, no matter how experienced and cautious you are, justifies that you haven't left your safety to chance.

Airtec GmbH & Co. KG Safety Systems

# Contents

| What a Smoke Jumper CYPRES 2 is 3       | į |
|---|---|
| 1. Function 4                           | ŀ |
| 1.1 How CYPRES works4                   |   |
| 1.2 Components 6                        | ) |
| 1.3 Power supply                        | • |
| 2. How to handle the                    |   |
| Smoke Jumper CYPRES 2 8                 |   |
| 2.1 How to deal with the control unit 8 | , |
| 2.2 How to check the operativeness9     | į |
| 2.3 How to handle in practical use 10   | į |
| 3. Access to unit information12         |   |
| 4. Changing the release unit(s) 13      | , |
| 5. Water contact 15                     | ì |
| 6. Important notes for users15          |   |
| 7. Error Display16                      | ) |
| 8. Installation17                       | , |
| 9. Technical service 18                 |   |
|   |   |

| 10. Repacking of the reserves | 21 |
|-------------------------------|----|
| 11. Regarding Air Travel      | 23 |
| 12. Technical Data            | 24 |
| 12.1 Versioning               | 25 |
| 13. Warranty                  | 25 |
| 14. Disclaimer                | 25 |
| 14.1 Limitation of use        | 26 |
| 15. Index                     | 27 |
| 16. Packing List              | 28 |
| Trade Marks                   | 28 |
|                               |    |

## What a Smoke Jumper CYPRES 2 is

The Smoke Jumper CYPRES 2 is an Automatic Activation Device for parachutes, which is built for the needs of Smoke Jumper activities.

It initiates the reserve deployment sequence; if the Smoke Jumper should still have a vertical speed of more than 35 meters per second (78 mph) at approximately 1200 ft AGL assuming the arming handle was pulled at 3000 ft AGL.

The Smoke Jumper CYPRES 2 does its job by severing the reserve closing loop allowing the spring loaded pilotchute in the reserve container to push away the flaps of the container and to jump out into the slipstream and initiate the reserve opening.

## **AWARNING**

CYPRES is not able to open your reserve. It is only intended to sever your reserve closing loop. CYPRES is strictly a backup device and does not replace proper training or timely execution of emergency procedures. It may display a wrong status, fail whenever and for whatever reason and may cause injury or death. If you are not comfortable with these risks you must not use CYPRES. You must make sure that the loop passes through the cutter's passing hole. If you loan, rent or sell your CYPRES to somebody it is your responsibility to inform him about the above circumstances.

## 1. Function

## 1.1 How CYPRES works

The processing unit contains a factory programmed microprocessor that is capable of real-time calculations of the jumper's altitude and rate of descent based on barometric pressure.

By monitoring this data, certain criteria are generated from which conclusions are drawn. Should the conclusion be that the jumper is in a dangerous situation (i.e. still in freefall at a low altitude) the processing unit triggers the release unit to initiate the reserve container opening sequence.

The release unit (cutter) system for the reserve container is completely independent of the rig's primary system, because it does not pull the ripcord pin out of the closing loop, but rather cuts the loop inside the reserve container to initiate the opening sequence.

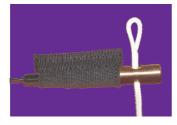
The reserve closing loop has to pass through the cutters passing hole.

Initiating the opening sequence of a reserve container by cutting the loop is a method invented and patented by the founder of Airtec, Helmut Cloth, in 1987.

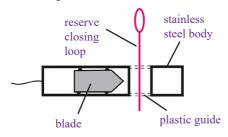
The CYPRES' activation system has these advantages:

- The reserve container opening sequence can be initiated in two different ways. One method is by the jumper manually pulling the reserve release handle. The other method is by CYPRES when it automatically cuts the closing loop.
- Mechanical components are reduced to a single movable piston in the release unit.
- The activation system is located inside the reserve container where it is not exposed to excessive shock or other adverse influences.
- The system is unobtrusive and can be installed so that it is undetectable from the outside.

## Release unit (cutter) with elastic keeper



## Functional diagram:



The distance which the piston moves in case of an activation is approx. 5 mm.

The release unit (cutter) is a unique design specifically developed for CYPRES. Features include a completely self-contained enclosure to avoid expelling anything during activation.

During an 18 month long investigation by BAM (Bundesanstalt für Materialprüfung), Berlin, 99 release units were tested. The result is that BAM and the U.S. DOT have classified the CYPRES as being non-hazardous.

Due to its high reliability and other properties, the CYPRES release unit is currently being used in aerospace applications (satellites).

## 1.2 Components

CYPRES consists of a control unit, a processing unit and one release unit (cutter) for 1-pin reserve container or two release units (cutters) for 2-pin reserve container.



control unit



processing unit

## **AWARNING**

Do not pull, lift, carry or throw CYPRES 2 by the cables.



release unit (cutter)

# 1.3 Power supply

No user attention should be needed for the power supply of CYPRES 2.

The unit should function from the date of manufacture (DOM) to the end of service life.

If CYPRES 2 should cease to function contact Airtec or SSK.

No CYPRES 2 user has ever spent any money on battery since 2003.



## 2. How to handle the Smoke Jumper CYPRES 2

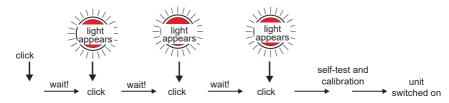
#### 2.1 How to deal with the control unit

The push button on the control unit should be pressed with the fingertip alone; please do not use a fingernail or any object. Use a short clicking action in the middle of the button. You should familiarize yourself with switching Smoke Jumper CYPRES 2 on to be able to do the functioning test.

With this Smoke Jumper CYPRES 2, you can use the control unit only to check the operativeness. Nothing else.

Do the operativeness check prior to every first jump of a day.

The functioning test of the Smoke Jumper CYPRES 2 is initiated by pressing the push button four times with very short clicks. Start the switch-on cycle by clicking the button once. After approx. one second, the red LED-light will glow. You must acknowledge the red light immediately by clicking the button again. This sequence - a click following appearance of the red light - will be repeated two more times. After a total of four clicks, Smoke Jumper CYPRES 2 goes into self-test mode. If you do not act promptly after seeing the LEDlight, or if you push the button to soon, Smoke Jumper CYPRES 2 will ignore the



switch-on attempt. This four-click initiation cycle has been designed to avoid accidental switch-on. Once the switch-on procedure is finished, the unit will run through its self-test. Initially, the display will show the number "10", and then a countdown ending in "0".

Between "2" an "0" the unit will interrupt and show the actual airpressure in hPa (that is equivalent to millibars). It will be a value between 700 and 1050

HPa is the scale the Smoke Jumper CYPRES 2 works with.

When you see the "0" at the end of the selftest then the functioning test has successfully finished and the display will go blank again, stating that the unit is ready for work.

## 2.2 How to check the operativeness

Perform a switch on procedure (see chapter 2.1) whereupon automatically the selftest will be carried out.

The selftest ends showing a 0 on the display for 1 second and then the display goes blank.

After this procedure the unit has shown its operativeness.

Conduct this operativeness check prior to every first jump of a day.

You can find video tutorials on how to use the control unit here:

www.cypres.aero/info/cypres-tutorials/



## 2.3 How to handle in practical use

Aside the operativeness check prior to the first jump of the day the sole action required for the Smoke Jumper CYPRES 2 is only necessary on the jumprun. Prior to exit, a handle on the main lift web must be separated from its velcro and pulled downward for at least 10 centimetres. (To confirm this action a "0" will be displayed in the control unit window) The Smoke Jumper CYPRES 2 will now initiate the active mode and monitors the situation. If it detects that the Smoke Jumper has left the plane and has fallen to approximately 1.200 feet AGL with a vertical speed higher than 35 meters per second (that is 78 mph), then it will cut the reserve containers closing loop to initiate the deployment sequence. The Smoke Jumper CYPRES 2 will initiate the deployment sequence of the reserve container even lower, down to approximately 400 feet AGL, if the vertical speed has not exceeded 35 meters per second at 1.200 feet AGL, but only later. These calculations assume that the the arming handle was pulled at approximately 3.000 feet above ground.

#### **Activation window**

- · Arm the unit on jumprun at approx. 3.000 feet AGL
- · Activation window starts at approx. minus 1.800 feet from jumprun
- · Activation window ends at approx. minus 2.600 feet from jumprun

If the arming handle is pulled at another height above ground: the activation should happen at approx. 1.800 to approx. 2.600 feet below this specific arming altitude if the activation conditions are given.

Once the handle has been pulled the unit is in active mode right away.

At any time it is possible to put the unit manually back into 'sleep mode' by bringing back the handle into its original position. The unit is now in 'sleep mode', when the arming cable is gently pushed into the Smoke Jumper CYPRES 2 and physically stops. To achieve 'sleep mode' it is mandatory to push the cable this far.

The unit will automatically go back into sleep mode two hours after the active mode was initiated or after a height loss of approx. 2.600 ft from arming elevation, even without touching the handle.

On packing your parachute after a training jump or a mission, bring the handle back into its original position. This is mandatory because only by "pulling the activation handle some centimeters downwards from its original position" will allow the Smoke Jumper CYPRES 2 to change between 'sleep mode' and active mode. This allows the unit to monitor what is going on and being ready to do its job.

#### In short words:

- the activation handle has to be in its original position when you enter the plane
- on the jumprun, prior to exit, it has to be pulled downwards some centimeters
- it has to be put back into its original position after the jump, at least prior to the next boarding.

## 3. Access to unit information

The Smoke Jumpger CYPRES 2 provides an easy way to view

- 1. the activation counter,
- 2. the units serial number,
- 3. the next maintenance date\*

When the 0 appears at the end of the switch-on procedure press the button immediately and keep it pressed.

Each value is displayed for 5 seconds, then the next value shows up.

You can stop the information sequence whenever you want by just letting go of the button.

\* After the 10 year maintenance has been performed, the words 'maint. no' and the date of the total lifetime (end of life) is shown.







# 4. Changing the release unit(s)

After an activation the release unit can be changed by any rigger (packer) via the plug-and-socket connection.

## Disconnecting the release unit:

Hold plug and socket by their aluminium grips and pull them apart using a smooth straight motion. Do not twist!



1-pin Cutter



#### Connecting the release unit(s):

Hold plug and socket by their aluminium grips. Place the plug directly in front of the socket and connect them by pushing together with a smooth straight motion until it is completely seated.

#### Do not twist!



It is easy to change a 1-pin CYPRES to a 2-pin CYPRES or vice-versa, by swapping cutter types.

## 2-pin Cutter



#### Notes:

- CYPRES 1 field replaceable cutters (no aluminum grip) can be used with CYPRES 2 They will function properly, however this combination is not water-resistant.
  - CYPRES 2 cutters (identified by aluminum grip) can be used with any CYPRES 1 with the field replaceable cutter connector. They function properly but this combination is not water-resistant.
- Release units (cutters) are numbered via a heat shrink tubing placed on the cable. This number identifies the cutter. A table of cutter numbers with corresponding dates of manufacture are available at www.cypres.cc
- 3. It is possible that the cutter plug could separate from the socket after a CYPRES activation. In the rare combination of this and a water landing, the socket must be dried out before further use. Do that by tapping the open end of the socket flat onto a flat surface such as a table top. Once

- no additional water comes out while tapping on the table top, store the CYPRES with the open end of the socket hanging downward for another 24 hours in a dry area, to allow the socket to dry out completely. When completely dry, insert the plug of the new cutter.
- 4. Use a one-pin cutter in a one-pin container and a two-pin cutter in a two-pin container.

## **AWARNING**

Do not use release units (cutters) after the end of cutter service life (16,5 years after DOM)

Used release units (cutters) that are / were attached to a CYPRES unit are also subject to a technical service / maintenance. See chapter 9.

New release units (cutters) that were never attached to a CYPRES unit and were stored (according to manufacturers instructions) do NOT need to be sent in for maintenance within the service time frame.

## 5. Water contact

Because of the cable housing for the arming cable, the Smoke Jumper CYPRES 2 is not waterproof.

If a Smoke Jumper CYPRES 2 came in contact with water, please send it in for a free inspection.

## 6. Important notes for users

- CYPRES is shielded against radio-transmitter signals. Extreme concerted efforts have been taken to protect the Smoke Jumper CYPRES 2 from "radio pollution". Although the extraordinary shielding system of the Smoke Jumper CYPRES 2 has been investigated thoroughly, it is impossible to have 100% pro-tection. It is still recommended to avoid strong radio-transmitters. Please contact Airtec if you have questions.
- A release unit that has activated builds up a high internal pressure and will remain pressurized. Never attempt to open it by force. It can, however, be stored safely for an indefinite period of time, provided that it has not been damaged.
- To achieve 'sleep mode', the arming handle needs to be pushed gently into the Smoke Jumper CYPRES 2 until it physically stops.

# 7. Error Display

If there is an error condition detected during the self-test countdown, CYPRES 2 shows an error code on the display.

lill or 2222 One or both of the attached release units are not correctly electrically connected to the unit. The reason may be a cable break, the cutter plug could be disconnected, or the release unit(s) may have activated. Check / replace the release unit(s).

3333 Excessive variations in ambient air pressure have been measured during the self-test period. The unit is unable to obtain consistent values for the ambient air pressure at ground level. Possible reasons could be that an attempt to switch CYPRES on has been made in a car driving uphill or downhill, in an elevator or in a flying aircraft. The switch-on procedure can be performed several times after a 3333 error was displayed. If 0' is displayed, the unit has successfully gone through the self-test.

Codes 1-3 are displayed for approx. 2 seconds, then unit switches itself OFF. (Display goes blank).

RGE unit reached last month of the total service life, displayed for approx. 5 seconds, unit remains ON

low battery condition. Please contact Airtec or SSK prior to next use.

After one of the following three error codes appears, the unit switches OFF and cannot be switched on again. Please discontinue use and send the unit in for service.

Pdo Power Down

CHS Checksum Error

PSE Pressure Sensor Error

If other error codes appear in the display, if the unit switches itself off and can not be switched on again, if the unit does not switch off after 14 hours, if there is no red light when the button is pressed, or if anything else unusual occurs please record the error code and contact Airtec or SSK before further use!

## **AWARNING**

Malfunction: A malfunction can easily injure or kill you or others. Every technical device can fail. So everything imaginable can happen with the CYPRES, including, but not limited to: displaying a status which is not true, failing to function, or functioning at a wrong moment or at a wrong occasion.

If you or your friends or family are not willing to accept these uncertainties and risks, then you must not use CYPRES.

## 8. Installation

The original smoke jumper harness and container was investigated by Airtec a number of years ago. The positioning of all components was defined and tested.

The new smoke jumper harness and container, designed by the Relative Workshop in the end of 2003 was also investigated by Airtec. The positioning of all components was defined in cooperation with the Relative Workshop and tested.

Under no conditions are deviations from these instructions allowed.

Control unit cable and cutter cable must be placed without tension. Excess cable is stowed in the flat part of the pocket underneath the velcro-adjustable flap. If you have to stow both the thinner cutter cable and the thicker control unit cable, be sure to place the thicker cable so that it lays on top of the thinner one. Cables should be placed in a circle in order to avoid twists. Always avoid pulling, bending, twisting or kinking the cables.





## 9. Technical service

The extremely reliable function of CYPRES is based on 4 facts: exclusive use of carefully pretreated and approved parts, strict detailed manufacturing procedures, continuous quality control and monitoring through the manufacturing process, and regular periodic technical service (maintenance). We offer a maintenance for 4 primary reasons:

- Deviations between nominal and actual values are corrected to ideal values. Every detail is observed. It is common that signs of wear and tear are corrected and sometimes even 'cosmetic' treatment is done.
- 2. The technical condition of each unit is analyzed. The fact that a very high percentage of units are returned for the periodic maintenance gives the ability to see statistical trends and to predict potential problems at a very early stage. The advantage: often it's possible to prevent situations by modifications during the maintenance procedures, rather than having to fix problems with downtime later.

- 3. Experience shows that during a period of a maintenance cyle (4 or 5 years), changes and improvements do happen. Applicable updates are performed during maintenance. Such updates may have the background of technical improvements, or enhancement of knowledge, or may result from environmental changes or changes in the sport (e.g. new disciplines), which Airtec is always researching and taking into consideration.
- 4. The most important part of the maintenance is the individual pre-adjustment of each unit for the next cycle. A unit will not be returned before a high confidence level is reached regarding the prediction of the unit's proper function for the next cycle.

## **AWARNING**

Reliability: As NOTHING lasts forever, the longer you use a device without a thorough check, the greater the chance that it does not work properly every time you need it. If you choose to not have maintenance performed on your device you're taking the risk that the reliability level will decrease.

Return your CYPRES 2 for maintenance (see chapter 12.1 for utilization cycle).

For maintenance cycle schedule see chapter 12.1 The earliest possible date for the CYPRES 2 maintenance is 6 months early, the latest 6 months after the month of manufacture. This maintenance window gives you more freedom, and avoids maintenance down-time at the wrong time of the year. It's smart to choose a suitable time during the 13 month window for sending the unit in for maintenance, rather than waiting until the last possible moment, or until the beginning of the next season.



Reaching the end of the first maintenance cycle your CYPRES will start to tell you that there is a maintenance possible in six month from then and the unit will display the proposed month and year.

That will happen after switch on in the self test between the unit showing and and o'.

From there on you have one year to give it to us and be in the maintenance window.

If you don't do it until the proposed date, then the unit will show month and year for a little bit longer then it did before.

Three month after the proposed date it will show month and year for an even longer time.

However, after this remembering your unit will always proceed and will go to and be usable for you.

If we receive your unit from exactly 6 month before the proposed date until six month after the proposed date (that means in the maintenance window) in our place for a maintenance, we will execute the procedure with all the details and consequences as described in this manual. The price for this treatment will be the CYPRES maintenance flat rate, even when a unit requires extensive repairs.

If you want us to do the maintenance, we really ask you to please give us your CYPRES in the meaningful time span. And not earlier and not later.

In case we receive your unit in our place outside of this time window we will possibly still be willing to execute a treatment, but the details and the consequences will likely be different and the price will be significantly higher. If a first maintenance has been done on your CYPRES, then your unit will give a second notice for a second (and last) maintenance when reaching the end of the second maintenance cyle. This will happen regardless of when a first maintenance was done.

After the second maintenance, CYPRES 2 should be usuable until the end of life. For service life schedule see chapter 12.1

During the service life of a CYPRES 2 unit, the parachutist should not have any operation costs other than the 2 maintenance fees (except for any required replacement cutters or waterproof filters).

Please contact your local CYPRES dealer concerning the maintenance. Please contact Airtec when you don't know who your local dealer is. The CYPRES Service Center for the USA, Canada, South America and other Western Hemisphere countries is:

SSK Industries, Inc., 1008 Monroe Road Lebanon, OH 45036 - USA Tel: ++ 1 513 934 3201 Fax: ++ 1 513 934 3208 email: info@SSKinc.com www.SSKinc.com

## **AWARNING**

Reliability: As NOTHING lasts forever, the longer you use a device without a thorough check, the greater the chance that it does not work properly every time you need it. If you choose to not have maintenance performed on your device you're taking the risk that the reliability level will decrease.

Return your CYPRES 2 for maintenance (see chapter 12.1 for utilization cycle).



## 10. Repacking of the reserves

You should definitely take advantage of the CYPRES closing loop and disc system.

Previous closing loops - made by old suspension lines or Kevlar or Darcron or Spectra or Optima - were thick and not very slippery and not very flexible.

On container openings, when circumstances are unfortunate, these loops can be squeezed between the grommets.

That may cause a delay of the opening or even avoid the opening at all for some seconds.

Fatalities did happen because of that.

Airtec has improved the closing loop system.

This is the result:





- no sharp edges
- minimal loop tearing
- extremely flexible
- extremely slippery
- breaking strength: 408 lbs
- diameter: 11/16 inch

The CYPRES closing loop is far safer than previous loops because:

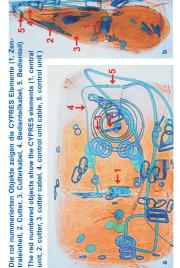
- the extra thin, flexible and slippery loop material reduces the possibility of the loop jamming in the grommets dramatically
- loop tearing is extremely reduced, because the fastening disc has no sharp edges
- the tensile strength is far greater (in excess of 408 lbs) than with former loops
- the extremely thin material which is impregnated with silicone reduces the pull force which is required to pull the ripcord up to 50% (although the tension on the container remains the same)

# 11. Regarding Air Travel

A CYPRES equipped rig may be transported in freight and passenger airplanes without restrictions. All its components (e.g. measuring technique, electronics, power supply, loop cutter, control unit, plugs, cables, casing) as well as the complete system, contain parts and materials that are approved by U.S. DOT and other agencies worldwide, and are not subject to any transport regulations.

Because of the size of a rig we recommend to check it in as normal luggage and to not take it on board as hand luggage. In case of questions or objections of the security personnel, please use the card shown on the right which you'll find in the back cover of this book. The card shows an X-ray of a complete rig with CYPRES 2. Depending on type and design of the rig the X-ray on the security's screen may vary.

The Parachute Industry Association and the USPA have worked with the Transportation Security Agency concerning traveling with parachutes. Refer to USPA's web site (www.USPA.org) for the latest recommendations and documents



If you've lost the card, you can get a new one from Airtec or SSK.

original card located in the back cover

## 12. Technical Data

for the Smoke Jumper CYPRES 2 excluding the ripcord housing for the activation handle: Length, width, height of the processing unit: .....approx. 85 x 43 x 32 mm

Weight: standard approx. 232 grams

Activation window: approx. 1.800 to 2.600 feet below arming altitude Activation speed: approx. > 78 mph (35 m/s)

Storage temperature: +71° to -25° Celsius Storage pressure: 200 to 1094 hPa ( 5,906 to 32,306 In.Hg)

Working temperature: +63° to -20° Celsius \*

Functioning period: 2 hours from initiating

Power supply......service life warranty\*\*

Maintenance see chapter 12.1 Total service life see chapter 12.1

<sup>\*</sup> These temperature limits do not mean the outside (ambient) temperatures but rather temperatures inside the processing unit. Therefore, these limits won't have any meaning until the processing unit itself has reached the temperatures in question. In actual fact, these limits will rarely be reached due to the mandatory location of the CYPRES in the reserve container, and the insulating properties of the nylon pocket and parachute canopies.

<sup>\*\*</sup> If required maintenance has been performed.

<sup>\*\*\*</sup> Anticipated, according to the present knowledge base.

## 12.1 Versioning

For units with DOM 12/15 and earlier the maintenance is mandatory to be performed 4 and 8 years after the original DOM. Service Life is 12.5 years.\*\*\*

For units made in 2016 the maintenance can be performed on a voluntary basis 4 and 8 years after original DOM. Service Life is 12.5 years.\*\*\*

For units with DOM 01/17 and later the maintenance can be performed on a voluntary basis 5 and 10 years after the original DOM. Service Life is 15.5 years.\*\*\*

## 13. Warranty

Airtec GmbH & Co. KG provides the 2 year warranty required by law, and 3 additional years where all repairs are free of charge, except resulting from intentional or negligent damages.

Thereafter, on a voluntary base Airtec will be very open to provide repairs or replacements for all non intentional or non negligent damages free of charge to all those customers who submit their units for maintenance on schedule.

This is a CYPRES practice already since 1991.

The manufacturer reserves the right to decide whether the unit will be repaired or replaced. Neither repair

nor replacement will affect the original warranty.

When a CYPRES 2 unit is returned to the manufacturer or service center, it must be packed in the original box or an equivalent shipping package including an entirely completed Service Form.

No claims will be accepted if the unit has been damaged or has been opened by an unauthorized individual, or if an opening of the processing unit, release unit (cutter) or control unit has been attempted.

## 14. Disclaimer

In designing and manufacturing CYPRES, the aim of Airtec GmbH & Co. KG Safety Systems, is that the device should not accidentally sever the loop but should try to sever the reserve closing loop when the activation criteria are met.

All investigations and experiments performed during the product's development and all laboratory and field tests accompanying trial and production phases have indicated that CYPRES meets both these goals.

However, as an electro-mechanical device the possibility of CYPRES malfunctioning cannot be excluded. Such may cause injuries or death. We accept no responsibility for damages and consequences resulting from any malfunction.

Airtec GmbH & Co. KG Safety Systems also accepts no responsibility for damages or problems which are caused by the use of non-original Airtec parts and supplies.

The use of CYPRES is voluntary, and does not automatically prevent injury or death. Risk can be reduced by assuring that each component has been installed in strict compliance with the manufacturer's instructions, by obtaining proper instruction in the use of this system, and by operating each component of the system in strict compliance with this User's Guide.

If used in the United States, the use of CYPRES shall be in accordance with USPA BSRs.

Automatic activation devices (AADs) sometimes display a wrong status, fail to operate or operate properly, and sometimes activate when they should not, even when properly installed and operated. Therefore the user risks serious injury or even death to themselves and others during each use.

By using or allowing others to use CYPRES, you acknowledge that you accept responsibility for the proper use of the device, as well as accepting the consequences of any and all use of this device.

Airtec GmbH & Co. KG Safety Systems, their Dealers, Service Centers, and Agents total and complete responsibility is limited to the repair or replacement of any defective device.

CYPRES is strictly a backup device, and is not intended to replace proper training or timely execution of appropriate emergency procedures. If you, your friends, or family are not in agreement of these disclaimers please do not use CYPRES. Please note that even though CYPRES has an extraordinary track re-

## 14.1 Limitation of use

regarding the CYPRES Cutter(s): Cutter 1-pin standard length – (Part Nr. 913100); Cutter 2-pin standard length – (Part Nr. 913200);

Cutter 3-pin standard length – (Part Nr. 913300); and each other non-standard CYPRES Cutter.

The customer agrees to the following limitation of use and its consequences.

#### LIMITATION OF USE

The customer acknowledges and agrees that the Cutter(s) will be exclusively used with CYPRES AAD devices in accordance to the CYPRES user guide. Additionally, Customer shall not reverse engineer, decompile, or disassemble the CYPRES Cutter(s).

Any usage of the Cutter(s) without a CYPRES AAD is generally prohibited.

Exceptions to this prohibition must be requested and approved in writing by Airtec GmbH & Co. KG Safety Systems. Approval is at the sole discretion of Airtec GmbH & Co. KG Safety Systems.

Airtec GmbH & Co. KG Safety Systems is not liable nor prosecutable for misuse and/or unauthorized use of the Cutter(s) and reserves the right to take legal action if misuse and/or unauthorized use of its products becomes known.

# 15. Index

| Accidental canopy opening26 | Limitation of use26      |
|-----------------------------|--------------------------|
| Activation window10,24      | Maintenance19            |
| Activation handle11         | No-charge inspection14   |
| Activation speed24          | Operativeness9           |
| Air Travel23                | Packing List28           |
| Airworthy21                 | Plug13                   |
| Backup device26             | Relative Workshop16      |
| CYPRES' activation system4  | Selftest9,10             |
| CYPRES disc21               | Socket                   |
| CYPRES Loop21               | Storage temperature24    |
| CYPRES Service Center21     | Technical improvements19 |
| Disclaimer25                | Technical service14      |
| Enhancement of knowledge19  | Trade Marks28            |
| Environmental changes19     | Unit information13       |
| Error condition17           | Updates19                |
| Functional diagram5         | Velcro-adjustable flap16 |
| Functioning period24        | Volume24                 |
| Functioning test9           | Weight24                 |
| Humidity24                  | Working temperature24    |
| Installation16              |                          |
| Internal pressure14         |                          |
| Jumprun10                   |                          |
| Lifetime Warranty14,24,25   |                          |
|                             |                          |

## 16. Packing List

In addition to the Smoke Jumper CYPRES 2 unit and the user's guide, the following items will be delivered:

For 1-pin Smoke Jumper CYPRES 2:

2 1-pin Loops

1 pull up

1 disc

For 2-pin Smoke Jumper CYPRES 2:

2 1-pin Loops

2 pull ups

2 discs

## **Trade Marks**

CYPRES is a trade mark of Airtec GmbH. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilm, recording, or by any information storage and retrieval system, without permission in writing from Airtec GmbH. No patent liability will be accepted with regard to the use of information contained in this manual. This manual was compiled with due care. Airtec GmbH and all persons and institutions involved in the translation of this publication do not accept any liability for mistakes, omissions or for any resultant damages.

Copyright © 2003 - 2018 by AIRTEC GmbH & Co. KG Safety Systems, Mittelstraße 69, 33181 Bad Wünnenberg, Germany,





Airtec GmbH & Co. KG Mittelstrasse 69 33181 Bad Wünnenberg - Germany Tel: +49 2953 98990 Fax: +49 2953 1293 www.military.cypres.aero