

Re: "electronically" puncture CO2 cartridge... how?

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- *From:* "David L. Jones" <altzone@xxxxxxxx>
 - *Date:* 10 Nov 2005 16:21:02 -0800
-

Richard Henry wrote:

> "David L. Jones" <altzone@xxxxxxxx> wrote in message
> news:1131662339.471313.111690@xx
>> Rob wrote:
>>>>
>>>> On a military sonarbuoy project I worked on we did this by having a
>>>> spring loaded spike that was held in place by a string which was
> rapped
>>>> around a resistor body. Pass current through the resistor and it heats
>>>> up burns the string and releases the spring loaded spike which
>>>> punches the can.
>>>>
>>>> This mechanism was manufactured in the tens of thousands and proved
>>>> 100% reliable. It even survived the harsh conditions of being slammed
>>>> into the ocean from a helicopter or plane.
>>>>
>>>> Dave :)
>>>>
>>>>
>>> Neat! What was it used for – recovery of the units from the ocean floor?
>>>
>>> rob
>>
>> When the unit hit the ocean a salt water battery would activate the
>> firing mechanism and inflate a bag so that the RF transmitter would
>> float on the surface while the sonar sensors dangled 100m below on a
>> tethered cable. The antenna was inside the bag too, so when the bag
>> inflated the antenna was pulled straight up.
>> After a set number of hours use the software would burn another
>> resistor attached to the side of the bag, this would puncture the bag
>> and cause the buoy to sink to the bottom.
>> Can't have those Russian fishing trawlers picking up the military
>> sonarbuoys now can we?
>> Yep, the ocean is unfortunately littered with tens of thousands of
>> these things :-(
>
> Not all of them sink.

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Correct. There are retrievable ones, dipping sonars, towed arrays etc.
But the disposable ones are still very popular in most navies around
the world.

Dave :)

• **References:**

- ◆ **Re: "electronically" puncture CO2 cartridge... how?**
 ◇ From: David L. Jones
- ◆ **Re: "electronically" puncture CO2 cartridge... how?**
 ◇ From: Rob

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