

Re: sport rocket staging timer

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- *From:* Jim Yanik <jyanik@xxxxxxxxx>
 - *Date:* 30 Apr 2008 12:26:39 GMT
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D from BC <myrealaddress@xxxxxxxxx> wrote in
news:d5kf14p9alp1lv1kg9bc0bop7lm7vleqin@xxxxxxxxx:

On Tue, 29 Apr 2008 22:19:56 GMT, Rich Grise <rich@xxxxxxxxxxxxx> wrote:

On Tue, 29 Apr 2008 08:20:12 +0000, Smaug Ichorfang wrote:

Some friends would like to build a down-sized model of a two-stage sounding rocket. I'm trying to come up with a design for a timer to ignite the second stage. The timer should be triggered by a "g" switch which marks first stage ignition, and time out after (an adjustable) 1.5-2 seconds, just after the first stage burns out. Commercial designs are available for around \$90. I only need to build ONE of these and don't have the programmer so a pic or BASIC STAMP are out. Any ideas or schematics for an analog or simple digital timer for this application?

When I was a kid, Estes rocket motors were available with an "after-charge", which is basically a hole at the top of the motor that shoots hot gas into the nozzle of the second stage right at burn-out. So, no electronics, batteries, squibs, none of that schtuff was needed.

called "ejection charge".

On today's AP-composite motors, such hot gasses will not ignite a second stage, thus you need electronics and better igniters that use more current. also, hybrid motors using Nitrous oxide as the oxidizer must use electronic-actuated chute deployment.

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"Model rocketry" has come a long way from the simple Estes motors of the 60's.

The idea of a 1.5–2 second timer with batteries and squib and all of that just seems ludicrous on a rocket where the first stage only lasts 1.5–2 seconds.

Good Luck!
Rich

Long ago I made a 3 stage rocket with those types of motors.
Never found the rocket afterward. :(
There was a note inside.. 'If found please call.....'
Never got a call :(

People now install loud beepers or RDF xmtrs in them to aid in finding a lost rocket.

And that was the last of my rocketery...
Electronics looked better as a hobby.
Breadboards don't take off and disappear. :P

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