

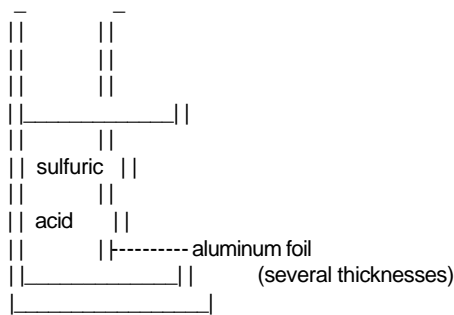
The main disadvantage with this type of timer is that it can only be set for a maximum time of 12 hours. If an electronic timer is used, such as that in an electronic clock, then delays of up to 24 hours are possible. By removing the speaker from an electronic clock, and attaching the wires of a squib or igniter to them, a timer with a delay of up to 24 hours can be made. All that one has to do is set the alarm time of the clock to the desired time, connect the leads, and go away. This could also be done with an electronic watch, if a larger battery were used, and the current to the speaker of the watch was stepped up via a transformer. This would be good, since such a timer could be extremely small.

The timer in a VCR (Video Cassette Recorder) would be ideal. VCR's can usually be set for times of up to a week. The leads from the timer to the recording equipment would be the ones that an igniter or squib would be connected to. Also, one can buy timers from electronics stores that would work well. Finally, one could employ a digital watch, and use a relay, or electro-magnetic switch to fire the igniter, and the current of the watch would not have to be stepped up.

#### ---CHEMICAL DELAYS---

Chemical delays are uncommon, but they can be extremely effective in some cases. These were often used in the bombs the Germans dropped on England. The delay would ensure that a bomb would detonate hours or even days after the initial bombing raid, thereby increasing the terrifying effect on the British citizenry.

If a glass container is filled with concentrated sulfuric acid, and capped with several thicknesses of aluminum foil, or a cap that it will eat through, then it can be used as a delay. Sulfuric acid will react with aluminum foil to produce aluminum sulfate and hydrogen gas, and so the container must be open to the air on one end so that the pressure of the hydrogen gas that is forming does not break the container.



The aluminum foil is placed over the bottom of the container and secured there with tape. When the acid eats through the aluminum foil, it can be used to ignite an explosive device in several ways.

1. Sulfuric acid is a good conductor of electricity. If the acid that eats through the foil is collected in a glass container placed underneath the foil, and two wires are placed in the glass container, a current will be able to flow through the acid when both of the wires are immersed in the acid.
2. Sulfuric acid reacts very violently with potassium chlorate. If the acid drips down into a container containing potassium chlorate, the potassium chlorate will burst into flame. This flame can be used to ignite a fuse, or the potassium chlorate can be the igniter for a thermite bomb, if some potassium chlorate is mixed in a 50/50 ratio with the thermite, and this mixture is used as an igniter for the rest of the thermite.
3. Sulfuric acid reacts with potassium permanganate in a similar way.

## **206. Film Canisters II**

**by Bill**

For a relatively low shrapnel explosion, I suggest pouring it into an empty 35mm film canister. Poke a hole in the plastic lid for a fuse. These goodies make an explosion audible a mile away easily.

1. Poke the hole before putting the flash powder into the canister.
2. Don't get any powder on the lip of the canister.
3. Only use a very small quantity and work your way up to the desired result.
4. Do not pack the powder, it works best loose.
5. Do not grind or rub the mixture - it is friction sensitive.
6. Use a long fuse.

## **207. Book Bombs**

**by Exodus**