If, however, it was in the | position, the drop of mercury would only touch the + contact on the A side. Current, then couldn't flow, since mercury does not reach both contacts when the switch is in the vertical position. This type of switch is ideal to place by a door. If it were placed in the path of a swinging door in the vertical position, the motion of the door would knock the switch down, if it was held to the ground by a piece if tape. This would tilt the switch into the vertical position, causing the mercury to touch both contacts, allowing current to flow through the mercury, and to the igniter or squib in an explosive device.

---Tripwire Switches ---

A tripwire is an element of the classic booby trap. By placing a nearly invisible line of string or fishing line in the probable path of a victim, and by putting some type of trap there also, nasty things can be caused to occur. If this mode of thought is applied to explosives, how would one use such a tripwire to detonate a bomb. The technique is simple. By wrapping the tips of a standard clothespin with aluminum foil, and placing something between them, and connecting wires to each aluminum foil contact, an electric tripwire can be made, If a piece of wood attached to the tripwire was placed between the contacts on the clothespin, the clothespin would serve as a switch. When the tripwire was pulled, the clothespin would snap together, allowing current to flow between the two pieces of aluminum foil, thereby completing a circuit, which would have the igniter or squib in it. Current would flow between the contacts to the igniter or squib, heat the igniter or squib, causing it to explode. Make sure that the aluminum foil contacts do not touch the spring, since the spring also conducts electricity.

---Radio Control Detonators---

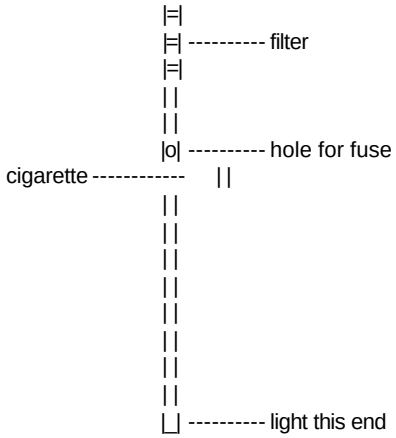
In the movies, every terrorist or criminal uses a radio controlled detonator to set off explosives. With a good radio detonator, one can be several miles away from the device, and still control exactly when it explodes, in much the same way as an electrical switch. The problem with radio detonators is that they are rather costly. However, there could possibly be a reason that a terrorist would wish to spend the amounts of money involved with a RC (radio control) system and use it as a detonator. If such an individual wanted to devise an RC detonator, all he would need to do is visit the local hobby store or toy store, and buy a radio controlled toy. Taking it back to his/her abode, all that he/she would have to do is detach the solenoid/motor that controls the motion of the front wheels of a RC car, or detach the solenoid/motor of the elevators/rudder of a RC plane, or the rudder of a RC boat, and re-connect the squib or rocket engine igniter to the contacts for the solenoid/motor. The device should be tested several times with squibs or igniters, and fully charged batteries should be in both he controller and the receiver (the part that used to move parts before the device became a detonator).

---DELAYS---

A delay is a device which causes time to pass from when a device is set up to the time that it explodes. A regular fuse is a delay, but it would cost quite a bit to have a 24 hour delay with a fuse. This section deals with the different types of delays that can be employed by a terrorist who wishes to be sure that his bomb will go off, but wants to be out of the country when it does.

---FUSE DELAYS---

It is extremely simple to delay explosive devices that employ fuses for ignition. Perhaps the simplest way to do so is with a cigarette. An average cigarette burns for between 8-11 minutes. The higher the "tar" and nicotine rating, the slower the cigarette burns. Low "tar" and nicotine cigarettes burn quicker than the higher "tar" and nicotine cigarettes, but they are also less likely to go out if left unattended, i.e. not smoked. Depending on the wind or draft in a given place, a high "tar" cigarette is better for delaying the ignition of a fuse, but there must be enough wind or draft to give the cigarette enough oxygen to burn. People who use cigarettes for the purpose of delaying fuses will often test the cigarettes that they plan to use in advance to make sure they stay lit and to see how long it will burn. Once a cigarettes burn rate is determined, it is a simple matter of carefully putting a hole all the way through a cigarette with a toothpick at the point desired, and pushing the fuse for a device in the hole formed.



---TIMER DELAYS---

Timer delays, or "time bombs" are usually employed by an individual who wishes to threaten a place with a bomb and demand money to reveal its location and means to disarm it. Such a device could be placed in any populated place if it were concealed properly. There are several ways to build a timer delay. By simply using a screw as one contact at the time that detonation is desired, and using the hour hand of a clock as the other contact, a simple timer can be made. The minute hand of a clock should be removed, unless a delay of less than an hour is desired.