FZFF04

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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X                                       X
X                                       X
X         FOLO ZONE FUN FILES           X
X                                       X
X      FILE "4" -- CARBIDE CANON        X
X                                       X
X                                       X
X                                       X
X                  by                   X
X  Z. DeBuggah of the Folo Zone Gang.    X
X                                       X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

<^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^>
<                                       >
<  Content Hazard Rating --  Serious.   >
<                                       >
<                                       >
<  Hazard Type -- Explosion  & Flying   >
<       Pieces.                         >
<                                       >
<  Special Precautions --  *  EYES  *   >
<       Wear eye protection (safety-    >
<       glasses).                       >
<                                       >
<vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv>
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YOU WILL NEED:-

A metal can with a press on lid. Examples are paint cans, or Hershey's Coco or Nestle's Quik cans. The new paper cans will work too but they wear out fast. A tank of acetylene or the ACETYLENE GENERATOR from the preceeding file in this series <FZFF03>.

THE SETUP/ASSEMBLY:-

Drill or poke a small hole in the middle of the bottom of the metal can of 1/16" or less, diameter. Drill or poke a similar hole in the middle of the lid of the can. Put a piece of waterproof tape (like black electricians tape) over the outside of each hole.

USING IT:-

The easiest way to safely load the "Canon" is to begin by filling it with water and then using it in a collection trough (Like the one shown in FZFF03; Acetylene Gas). The bubbler tube can be connected to an acetylene tank such

as on a welders torch, or the Acetylene Generator or bags of acetylene filled with the Generator shown in FZFF03. Once the can is full of gas (after the water has all drained out and bubbles start coming from under-neath the inverted can, press on the lid, and leave the tape in place.

IN PRINCIPLE:-

Once you take the <NOW LOADED> "Canon" to where you want to use it, by setting the can on something that will keep it off the ground and is ventillated underneath, countdown can be started. Remove the tape from both holes. Since Acetylene is lighter than air, air will begin entering the bottom hole as acetylene floats out the top. The flow is just about right to make a lantern flame above the exit hole at the top. Promptly light the top hole of the can and and get back, deliberately, as you will have several minutes to wait. (The time depends on the size of the can you use and the size of the pinholes you put in it.)

At the beginning, the can contains and vents only acetylene so that only above the can can it get enough air to burn, and only the gas which has exited is flamable. As air comes in the bottom, though, it begins to mix with the gas inside the can so that the mixture becomes increasingly activated with oxygen. Eventually the air level will reach its Flash Ratio, and the flame from the top of the can will move down inside, igniting all the acetylene that remains inside the can AT ONCE, and the "Canon" GOES OFF.

FIRING PHILOSOPHIES:-

Straight off you will see that you have a choice of setting off the shot with the lid up (to shoot the lid) or the lid down (to shoot the can) into the air. Also, because the fuse flame is sensitive to wind, you may want to fashion a chimney (or "Barrel") out of another can, a roll of linoleum or formica, or
a length of PVC pipe of suitable diameter. This has two additional advantages beyond keeping the flame lighted, in that it dramatically enhances the BOOM, but also improves your control over the direction of the projectile ejected.

By loading many canisters with their holes taped, before hand, you then have yourself an easy reloader, cartridge fashion.

Another variation is to put the pinholes on opposite sides of the metal can and then mounting it in the "Barrel" horizontally. In this case, a backstop is needed and the chimney cannot be part of the "Barrel".

Some of my best shots have been 5 gal ice cream carton or hat box One-Shotters, filled dry from an acetylene tank at a wide setting. Because of the uncertainty of this fill method, these canons were lit with sparklers on the end of a 12 foot pole.

This kind of canon readily lends itself to loudness, altitude and distance competitions, since it's all hand made.