Greetings;

Rockets have only recently begun to have the popular status it deserves even though they have been around almost as long as any powder base explosive. They have been used in every major conflict since the Revolutionary War.

Nothing in today's arsenals sends more fear in a combat trooper's heart than to hear or see one go by, not to mention if it was aimed at them. In the form of their shaped charges they can cause as much damage as almost anything and their accuracy and direct in line fire capabilities make the armorers' job much simpler not to mention the airplane pilot or foot soldier who fires it.

These shotgun grenades/rockets are in effect somewhat similar to the RPG rockets used in COM/BLOC nations worldwide in that they are fired through an instantly reusable launcher. The only catch on ours is that you use a personal defense weapon to fire them.

These rockets carry a small grenade explosive in its nose and when it impacts a target it will crush the primer and touch off the explosive. Backblast from the launch varies but is usually very minimal. We advise that if you do make these you test your first one's in a remote method. We also want you to know that to construct these rockets with an explosive is ILLEGAL and considered a felony by the U.S. Government. Due to this fact we only market these plans as "for entertainment purposes only". We do not mean to say that these plans are useless but by stating this we not only protect ourselves but you as well.

The rocket motor used in these is a recomposition of existing model rocketry engines. You will need to go to your nearest hobby shop that carries these supplies and select one that has a load carry range of in excess of 14 ounces. The only other tools required for the construction of these are a hacksaw, hammer, riveter, shotshell reloader, and some plastic and copper tubing (sizes described later).

Finally we must state that these devices are not toys and should be considered extremely dangerous. Do not take any unnecessary risks either in construction or firing. Make sure of your target and please "BE CAREFUL".

**STEP #1:** Obtain some plastic tubing that fits the bore diameter of your shotgun barrel with room enough for it to slip easily through from one end to another. Obtain as thin a wall material as possible.

**STEP #2:** After obtaining the desired lift rocket motor you will need to peel off the outer paper and the clay end plug. **DIA. #1:**

**STEP #3:** If after removing the end plug and wrappings the black fuel portion of the motor does not fit snugly (whether undersize or oversize) you must crush the fuel and then repack it into one end of the plastic tubing. Pour it in one end and when it reaches bottom then tamp it until very solid. Be sure it is flush with the end of the tubing after packing. **DIA. #2:**

**STEP #4:** Cut off the tubing at no longer than 14".
STEP #5: Obtain a clothes pin and cut two pieces of plastic that resemble the one's depicted with a 1/2" wide base and a 2" backside. Use some very strong glue and glue them as shown. Pinch the ends together and see if it will fit into the open end of the plastic tubing. If it won't fit then trim the fins until it will. DIA. #'s 3 & 4.

STEP #6: Just above the packed rocket fuel make two slits in the plastic tubing as long as the fins are. DIA. #5

STEP #7: Pinch the ends of the fin assembly together and push down into the tube until it reaches the slits. The fins should pop out now. You may want to make another assembly like this further up on the tube and even turn them in the opposite direction but it is not normally necessary. DIA. #6.

STEP #8: Measure the distance from the end of the fin area to the end of the tube and now cut a piece of copper tubing 1/2" longer than this distance. (NOTE, this tubing must be of a size that fits in the end of the plastic tubing easily) DIA. #7

STEP #9: Take this tubing and cut two slits in the end of it all the way across approximately 1/2" long. Now fold these over each other in an X-pattern. Rivet them together and then melt some wax into the end of the copper tubing at the X-pattern to seal it. DIA. #8

STEP #10: Fill the end of this tubing up to near the top with your favorite fast burning nitrocellulose (smokeless) gunpowder. Hold this back from the end approx. 1/2". DO NOT UNDER ANY CIRCUMSTANCES USE ANY FORM OF BLACKPOWDER. DIA. #9.

STEP #11: Take a small pistol cartridge or smallbore shotshell and cut it off at about 1/2" from the base. Place a primer in it. And then place it inside the copper tubing backwards as shown. Now Seal the whole end of the assembly together with wax melted on the end. DIA. #10.

STEP #12: Insert this assembly into the end of the rocket body as shown. Make sure the primer end is facing outward. Seal them together with more melted wax. Make sure the explosive will not fall out. DIA. #11.

STEP #13: Take a primed shotshell for the bore of the gun you choose to fire it in and put the rocket into the open end of the shotshell with the powder end of the rocket next to the primer of the shotshell. DIA #12;

The assembly is now ready for use. To use open the breech of the shotgun and insert the assembly slowly inside. It is somewhat difficult to do with autoclinics and pumps but is not impossible. The fins will fold as it is inserted. When you pull the trigger and the hammer falls on the primer it will ignite the fuel of the rocket slowly but will eventually build up enough pressure to launch. Launches can be frightening at first attempts and much care to protect your self must be taken. You may notice extreme drop so holdover may be necessary or lightening of your explosive load could help. To achieve even greater distances it is possible to add boosters at the end of the fuel however, any added weight will probably cause a slower launch.

We hope you enjoy these and please "BE CAREFUL."
The fins are not absolutely necessary. It will work without them but fishtails down range. Please be careful!