

## ONE MAN'S OPINION OF A HELICOPTER

The helicopter is an amazing assortment of nuts, bolts, rotors, pushpull rods, irreversibles, longitudinal collective differential quadrants, swash plates, wobble plates, gimbal rings, cuff and trunion assemblies, and other gadgets too numerous to mention here. All of these are welded, riveted, bolted, or sewed (sometimes wired) together to make a single machine capable of flight. In fact, it is capable of flight in any direction, backward, forwards, sideways, up, down, and even standing still. Standing still is known as hovering. This comes in handy for those who like to fly but have no place to go.

One of the more necessary components is the engine. This unit is expected to start with ordinary fuel, change it to BTU the BTU to BMEP, the BMEP to RPM. The RPM is then transmitted thru a series of shafts and gears to the main rotor blades which are responsible for the frantic egg beater motion.

The engine has several important parts. Among these are the cylinders. A cylinder is a long hole covered on one end with a plate full of holes containing valves. The holes admit air, fuel, and sometimes water and carelessly misplaced tools. The other end is closed with a plug called a piston. This is free to move up and down and would come out altogether if it were not fastened to a connecting rod. The connecting rod, too, is important because it is responsible for converting your BMEP to RPM. Without it you would be left with BMEP, which no one knows how to use up to now.

The engine power is measured in horsepower. Why? Who knows. It's often difficult to get a self-respecting horse in close proximity with one of these machines. It is better to rely on instruments the electrical men have invented. They indicate power in amps, volts, or kilowatts, depending on the individual whims of the designer. With a little imagination these values can be converted to horsepower.

Starting the "thing" requires some knowledge, steady nerves, and a certain amount of bravery. First make a careful check of all your instruments - both of them. This gives you a little self-confidence and adds prestige in the eyes of the on-lookers.

After everything has been checked, it is safe to start the engine. If everything is as it should be, there will be a considerable noise and you will start to shake and tremble. That means the engine has started. When your audience has returned, synchronize your eyeballs and look wisely at the instrument panel, noting pressure, RPM, and before you forget it, check the flight controls. This is important even though they quite often do not perform the function for which designed. It is very embarrassing to get in the air and find these items not working properly, or just not working, period. Once airborne you are on your own, you have willfully and knowingly placed yourself in the most horrible of all predicaments. May the good Lord have mercy on your soul. You have earned it!

ANONYMOUS