

BUCK CLUB NEWSLETTER

MEETING!

Come out to the field! On Tuesday, September 4 at 7:00 pm, we will be having our quarterly meeting. Immediately prior to the meeting we will be flying, so bring your equipment and flying machines.

Place: Buck Flying Field @ Musser's

Rain Date: Thursday

Reminder: Flying Night is every Thursday! ☺

PLANE RESPECT

Sadly, I have to say that I had a painful incident with my fathers flying downspout plane. On Saturday June 02, 2001, my father and I decided to go flying at the field. We started up my dad's plane. He did some wild taxiing and promptly flipped the plane over. I then ran out to the plane, and for some very strange reason, I thought it wouldn't start up. When it did, it surprised me, and stupidly, I let go of it. The plane moved forward, and the propeller blades hit my knee at idle. I stood up and cried out! At this my dad came running. Then they packed up the stuff and rushed me home. My mother and father made a

WARNING

"Guys we are at it again, we lost three planes Thursday night all due to apparent radio interference. Does not seem to be channel specific but it's catching everyone at the worst time. I believe this happened last year, does any one have any ideas on how to fix it? At this time all operations at the field should cease until further notice." -Bob Rieker, President

The fun fly is postponed until a later date... perhaps October? Instead, check out the Cloud Kings on the 21st... flyers are at the store.

few calls, and I was driven to the doctor's office where I got 16 (sixteen) stitches.

I guess you should be reminded that these planes and engines are dangerous and should not be worked around casually. I also have a tip. When starting a plane, kneel behind or beside, never in front of, the spinning blades. And because of my incident, I now have a greater respect for these planes. - Ben Converse, age 14

WHAT IS A TWO-CYCLE ENGINE?

Two-cycle engines can be found nearly everywhere these days... including our airplanes. The terms “two-cycle” and “two-stroke” are often interchanged when speaking about two-cycle engines. These engines derive their name from the amount of directional changes that the pistons make during each power stroke.

These internal combustion engines are used to produce mechanical power from the chemical energy contained in hydrocarbon fuels. The power-producing part of the engine’s operating cycle starts inside the engine’s cylinders with a compression cycle. Following this compression, the burning of the fuel-air mixture then releases the fuel’s chemical energy and produces high-temperature, high-pressure gases. These gases then expand within each cylinder and transfer work to the piston. Thus mechanical power is produced.

LUBRICATION

Two-cycle engines are considered total-loss type lubricating systems. Because the crankcase is part of the intake process, it cannot act as an oil sump as is found on four-cycle engines. Lubricating traditional two-cycle engines is done by mixing the oil with the fuel. The oil is burned upon combustion of the air/fuel mixture.

-Adapted from Amsoil Action News, 7/2001

HOW ARE TWO-CYCLE & FOUR-CYCLE DIFFERENT

The fundamental difference between two-cycle and four-cycle engines is their gas exchange process, or more simply, the removal of the burned gases at the end of each expansion cycle and the induction of a fresh fuel mixture for the next cycle. The two-cycle has an expansion/power stroke in each cylinder during each revolution of the crankshaft. The exhaust and the fuel charging processes occur simultaneously as the piston moves through its lowest position.

In a four-cycle engine, the burned gasses are first pushed out the exhaust by the piston during an upward stroke, and then a fresh charge of fuel enters the cylinder during the following downward stroke.

PROS & CONS

Because two-cycle engines can effectively double the number of power strokes per unit time when compared to four-cycle engines, power output is increased. However, it does not increase by a factor of two. A scavenging effect allows up to 30 percent of the unburned fuel/oil mixture into the exhaust. In addition, a portion of the exhaust gas remains in the combustion chamber during the cycle.