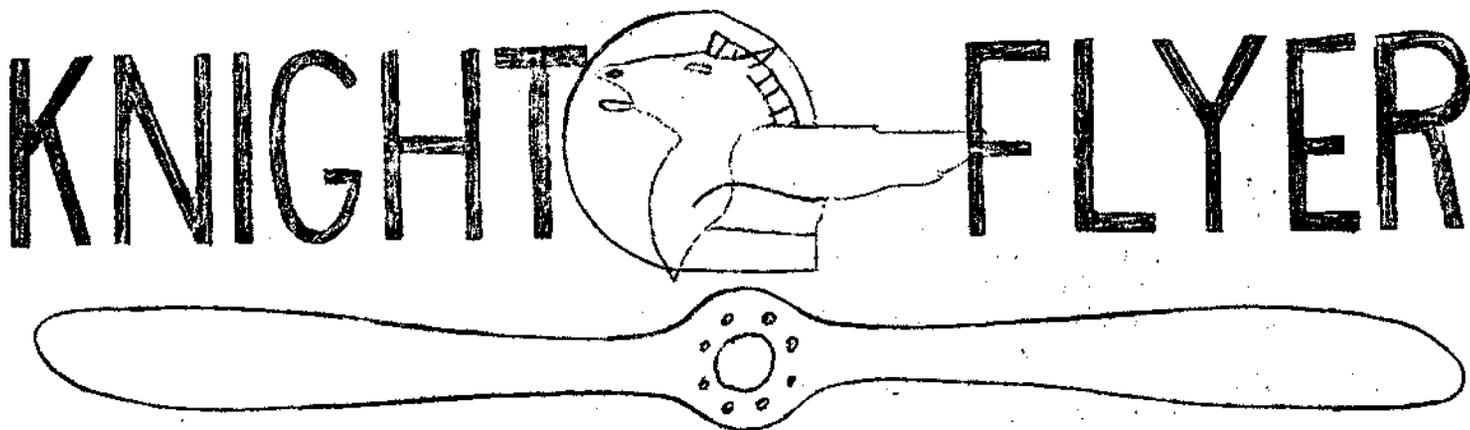


# KNIGHT FLYER



Newsletter Of THE FLYING KNIGHTS OF HAMBURG N.Y. INC.

Edited by Bill Eberhardt

NEXT CLUB MEETING——March 8th., 1974 at the Boston Library--8:30 PM——SPECIAL FEATURE"——Eastman Kodak Film "I Fly Them, I Brake Them, I Fix Them". This film has been on TV and is supposed to be a very good account of our hobby.

HILITES of the meeting of Feb. 15th., 1974-——

Our contest committee for the August 25th. FUN-FLY reported that they have been considering several different and unique events to be used at the contest. One of the events which created a great deal of interest was called the "Limbo With A Window". This would expand on the usual limbo event by having two horizontal crepe paper streamers between the two poles and would also have two vertical crepe streamers connecting the horizontal streamers creating a definite "hole" through which the contestant must fly his airplane. This event sounds like a lot of fun and we will try to experiment with the idea before the contest to work out the details.

Another event will probably be a "Bomb-Drop" with points for dropping the "Bomb" closest to the spot on the field and also points for the time taken to land the plane closest to the spot where the "Bomb" hit the field. All points will be added up and the flyer with the lowest score wins. By the way if any of our readers knows where we could obtain or "borrow" a tank of helium to use for filling balloons at our contest please let one of our club officers or contest committee people know as soon as possible.

It was good to see Ed Schelble with us again as he was one of our club's better flyers and we missed him this last flying season. Seems Ed had found other interests to occupy his time but now has the bug to get back into the air again.

The 50-50 raffle was won by member John Felong.

NOTICE!!!!!!!!!! - Tom Stanes called me to say that our shipment of fuel has arrived already and the price should be the same as last year at \$3.75 a gallon. After talking to several manufacturers at Toledo I was concerned that we might not be able to get any fuel for this year but now we should be in good shape for the entire season. Tom will let us know soon as to how, where, and when the members can get their fuel.

Jerry Piscitello says that he has the club hats and will bring them to the meeting March 8th. Price of the hats will be about \$5.00 each and Jerry said that they are verry good looking. If you can't get to the meeting you can pick up a hat at Jerry's on your regular trips over there.

Here is a list of the contests that the R.C.Aircrafters are going to hold at the Lakeview Road Kike Base this year - further details will be printed in future newsletters- plan to attend some or all of these contests to help support our fellow area clubs -

JUNE 23, 1974 - Team relay contest.

JULY 21, 1974 - Class A & B Pattern and Stand Off Scale.

JULY 28, 1974 - Pylon races.

AUGUST 11, 1974 - Fun-Fly.

SEPTEMBER 15, 1974 - Free style acrobatics.

ENGINE HINTS—Never run an engine without a fuel filter in the fuel line! Most flyers even use a filter on the line which comes out of their fuel supply container to the plane. Also you should avoid filling your tank through the line which runs to the carb. or your filter will be useless because any dirt in the fuel will be caught on the wrong side of the filter and will be sucked right into the needle valve when the engine is run. You should also be very careful when putting the soft fuel lines on their fittings because they can be cut very easily by the sharp edges of brass tubing etc. With careful attention to keeping your fuel clean and your fuel lines tight and with no leaks you should be able to get consistantly even engine performance for long periods of time without excessive needle valve adjustment.

I have had the best results with the porous-bronze clunk-type tank filters. These filters have a very large capacity and do not require cleaning very often.

The other day I received a call from an old flying, buddy, Manfred Von Splatte. Manfred, better known as the Barron, heard that our club was looking for some FUN-FLY events and suggested a couple of real crowd pleasers. One event that the Barron relly liked was called "Leap-Frog Limbo". Seems that you stretch a crepe paper limbo line in the usual manner about ten feet off the ground but the real twist is that about fifteen feet past this you build a twenty foot high cement block barrier. The trick is to fly under the limbo line and then quickly climb out to avoid the block wall. The winner is the flyer who makes it over or through the barrier the most times. The Barron says that the contestants do not seem very enthused about this event but the spectators just love it.

TOLEDO- Well Toledo is past history by now but to those who attended the conference there will be many interesting new things to dream about for some time to come. We made it down and back without any serious problems in spite of the gasoline shortage and the trip was Well worth the effort. It was good to see a couple of our ex-Knights namely Gus Burgin and Dave Maurer who stayed with our group from Buffalo. The conference should be covered in the magazines so the only comment I'll make is that you should have been there.

"GLITCHES"

by Jim Devlin

Bias - forward and reverse.

The idea of bias is best understood by considering the relationship between the device (diode or transistor) and it's supply voltage. First consider the diode.

There are two kinds of semiconductor material, N-type and P-type. N-type contains free electrons to carry current and P-type contains free holes (a space created by a missing electron). A diode consists of a junction formed of these two materials as shown in Fig. 1. Fig. 2 shows how we can connect the battery in two ways.

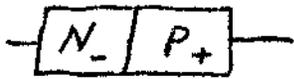


FIG. 1

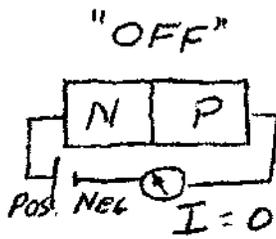
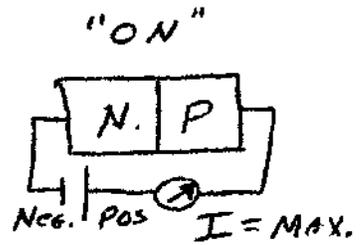
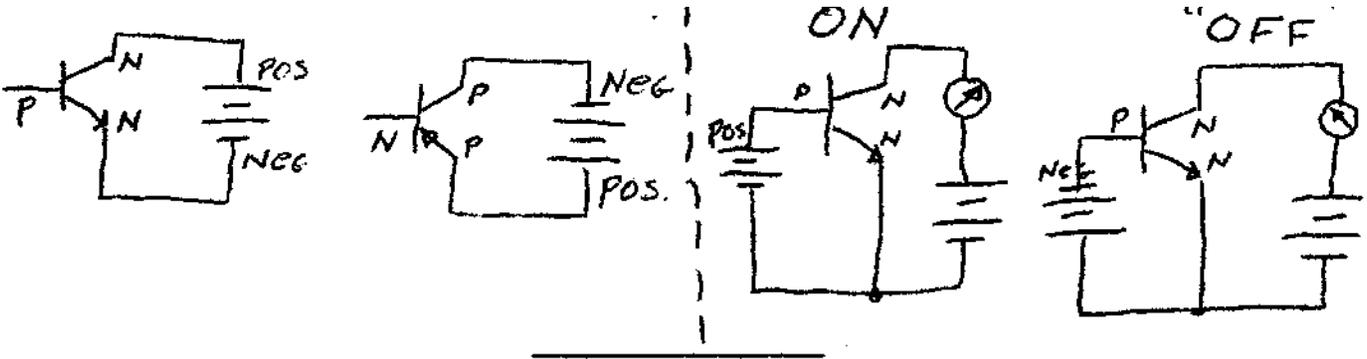


FIG. 2



If we connect positive to P and negative to N, we say the diode is "forward" biased. This condition turns the diode ON and it conducts current. Turning the battery around so that positive goes to N and negative goes to P is called "reverse" bias and the diode does not conduct, that is, it is turned OFF.

This idea of FORWARD and REVERSE bias is also applied to the transistor. Fig. 3 shows that regardless of the type, the collector is ALWAYS reverse biased. Of course the emitter is then forward biased. When we FORWARD bias the base (base-emitter diode), we turn the transistor ON and when we REVERSE bias the base we turn it OFF, just as we did with the diode.



Don't throw away those broken props, especially the nylon types, as they can be used as a spatula for mixing up that next batch of epoxy cement. When mixing up very small batches of epoxy cements you must be very accurate about measuring out the correct amounts of each ingredient or you may find that the cement either wont cure or will not have the proper strength.

PS. - DON'T FORGET - NEXT MEETING  
MARCH 8th. - WILL HAVE A  
MOVIE.