

RIESE ON IGNITION SYSTEMS

The following is an excerpt from an article in the June 2006 issue of the Southern California Ignition Flyers "Flight Plug", Mike Myers, Editor

(PFFT Ed. Note: John Riese came to the SCIF meeting and preached to the former choir, i.e., those who formerly flew ignition. He provided the following information which might be of interest to someone contemplating getting into this or perhaps a reminder for those still in it.)

I. Ignition System Components

- a) Coil
- b) Spark Plug
- c) Points
- d) Condenser or electronic module
- e) Battery
- f) Timer
- g) Booster Jack
- h) Charge jack or battery box
- i) Wiring

II. Hints for Successful Operation

- a) Do not use a plastic battery box. Either make your own from wood and sheet brass, find an all-metal one, or use soldered-in NiCads.
- b) Use crimp connectors or solder lugs on wiring to the points. Do not just twist the wire around the timer or engine mounting screw.
- c) Mount the condenser, coil and battery so that vibration will not break off the wires. The condenser does not have to be physically at the points, even though this may be the easiest place to put it. John Riese uses E6000 glue (available at Bobe's) to stick parts to the airframe.
- d) You can use three D Cells for a booster (Myers uses a 4v sealed lead-acid cell by Gates Energy) for faster starts, but you will burn up the coil if you leave them connected for more than a minute or so with the points closed. (Ed. note: There is a question then as to whether 3 small NiCads for onboard power will burn up the coil if the engine stops with the points closed. It appears that several folks use those or three 600 mah NiMh cells)
- e) IF you turn on the timer while starting, the internal and external batteries are in parallel and the booster batteries give a charge to the internals.
- f) A miniature alligator clip is handy for the coil to the plug connection.
- g) A slice of non-embossed business card is good to install between the points after flying. It can also be used to clean the points as the paper absorbs oil.
- h) If you wire the booster jack in parallel to the flight batteries you can use it to charge the internals. Be sure that the slice of business card is installed between the points. This will keep the points open while you are charging the battery. (If you use the diagrams below, the only way to charge the onboard battery through the booster jack is if the timer is on.)

III. Sources of Ignition Supplies

a) John gets his ignition timers from Texas Timers.

b) John gets his coils and spark plugs, and transistorized ignition systems from Larry Davidson Samchamp@charter.net or from Floyd Carter at AeroPly Research in Oregon AeroPlyCo@aol.com

c) Booster jacks (3.5 mm miniature phone jacks open frame) are obtainable at Electronic City in Burbank. John gets his small ignition batteries (usually cell phone packs) from All Electronics on Oxnard Street in Van Nuys.

