JAYHAWK MODEL MASTERS NEWSLETTER

AUGUST 1991 A.M.A. CHARTER #2013

The next meeting will be August 17, 1991, 8:30 a.m. at the All Season's Motel.

MEETING MINUTES

JULY 20, 1991

Darrell Andersen won the ACE Charger. Don Sherman won an RC Report. Richard reported a total of $829.49 in the treasury ($309.67 of the balance is the Clinton Lake Clean-Up Fund and donations).

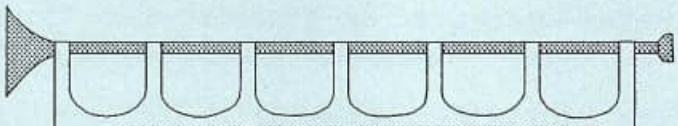
Richard has spent $221 for shirts and jackets. Contact Richard Ballard if you want a shirt, jacket, or cap.

The new pin board is now up and cost $127.31 for materials.

Brett Bennett brought a Dynaflite Fun-scale Spitfire.

There was also an electric plane designed from a PT-20 and 40 shown. (Editor's apologies for not knowing the builder's name.)

We want to welcome new members Bill Snyder and Dale Hieserman.



IMPORTANT ANNOUNCEMENT

NOMINATIONS FOR CLUB OFFICERS WILL BE HELD AT THE AUGUST MEETING. If you desire a nomination or want to nominate someone, please be there!

JAYHAWK MODEL MASTERS
132 Florida Street
Lawrence, Kansas 66044
913/843-8623
A.M.A. CHARTER #2013
PRESIDENT/TREASURER
Richard Ballard - 913/843-8623
VICE PRESIDENT
Dave Plamann - 913/842-1837
SECRETARY/EDITOR
Tom Puckett - 913/841-5889
SAFETY OFFICER
Darrel Cordle - 913/749-4146
FIELD MARSHALL
Nate Ericson - 913/843-7395

ITEMS FOR SALE:

NEW (still in box)
OS 70 Surpass: $150.00

NEW (still in box)
79" wing-span
TELEMASTER 2000: $110.00

Floyd Calkins: 1-246-2245
Please call in the A.M. only

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NEW (still in box)
OS 61: $125.00

Fox 74 (slightly used): $60.00

Royal Corsair 60-size (built and flown twice): $150.00

Tom Puckett: 841-5889

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HERE IS THE ANSWER TO LAST MONTH'S PUZZLE:

Words used in Puzzle.

1 = AILERON
2 = ARF
3 = CAP STRIP
4 = CYANOACRYLATE
5 = ENGINE
6 = GUSSET
7 = LAMINATE
8 = MONOCOTE
9 = PUSHROD
10 = ROLL
11 = SERVO
12 = SPAR
13 = STRINGER
14 = TISSUE
15 = WASHIN
16 = YAW

KEY

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. . C W G U S S E T I S S U E
. . Y E A . . E . . . . . . .
. . A . N S . . R . . . . . .
. . N A . G H . . V . . . . .
. . O . I . I I . . O S P A R
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. . C . . . E . E . . L . . P
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HOW TOO: FUEL TANK SET-UP

A fuel tank seems like a fairly simple thing. How is it then, that we seem to have so many problems with them? What follows are a few suggestions on setting up a new tank to operate properly. In order for a tank to do its job, it must: (A) Not leak; (B) Have a vent system connected to muffler pressure; (C) Be mounted in foam rubber to prevent vibration-caused fuel foaming; (D) Be plumbed with high-quality fuel line in good condition; (E) Have a pick-up tube weight (Clunk) that is free to move around and follow the fuel during maneuvers; (F) Be set with its center line even with the carb spray bar.

If the above conditions are all met, your tank will work without problems. Items A, B, C & D are easily done, but we often seem to have problems with E & F. Let's take a look at these two requirements and get into a little more detail.

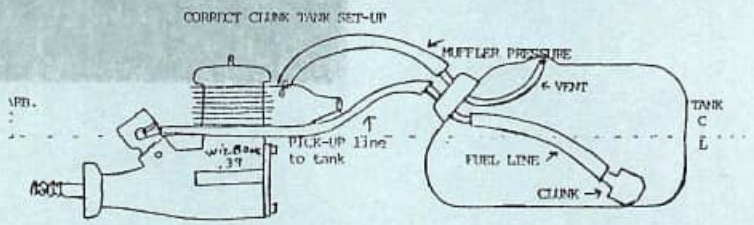
The "clunk" is the metal weight that goes inside the tank on the pick-up line. The end should stop short of touching the back of the tank by about 1/4" to 1/2". This is to insure the clunk has room to move around and stay with the fuel when the plane banks, climbs, or flys upside down. Most people use the clunk style pick-up all the time and never have a problem. There is another way to do it, however, and this method is almost 100% fool-proof, so we will look at it also.

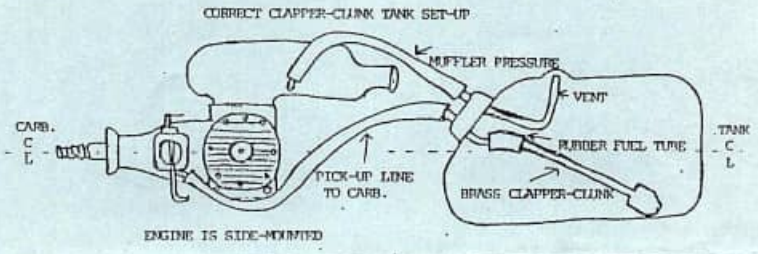
The other type of pick-up is called a "clapper-clunk" set-up. The idea is the same but

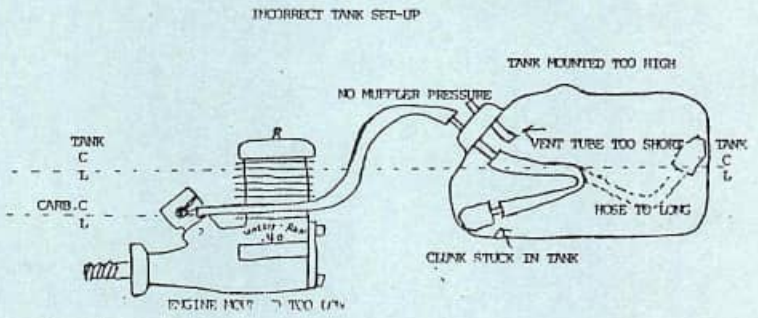
in this case a short length of 1/8" brass tubing is soldered to the "clunk" and this is connected to the plug pick-up tube by only a short length of fuel line. THE COMBINED LENGTH OF THE BRASS TUBE AND CLUNK MUST BE SLIGHTLY LONGER THAN THE WIDTH OF THE FUEL TANK. The idea here is to stop the "clunk" from turning around inside the tank and getting wadded up and stuck in one place. Since the "clapper-clunk" is longer than the tank is wide, it can't go anywhere except around the side of the tank as it follows the fuel. This is especially useful in trainers and aerobatic aircraft. If you have ever tied a half-hitch in your pick-up line while doing an avalanche, or wadded up the clunk line in a "controlled crash" landing, you will recognize the value of the "clapper-clunk" set-up! It can take forever to figure out why your engine went sour when your clunk isn't clunking!

Item F, or setting the tank center-line even with the carb spray bar is often impossible due to aircraft design. All we can say here is that the closer you get to this ideal position, the better your engine will run. If it turns out that the only place the tank will fit is below the carb center line, then expect your engine to go lean as the fuel is used up during a flight. It is worth the trouble to side-mount your engine if necessary to get the carb down to tank level.

Why not take a look at your present tank set-up and see if it meets all these requirements? If not, take the time to fix it right. A better and more consistent engine run will be the result. Then you can fly when you go flying, instead of working on your airplane! FLY SAFE! RLB







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FALL FUN-FLY TIME

It is time to start thinking about the Fall Fun-Fly. If you have any ideas or suggestions, bring them to the meeting.

PERFORMANCE

All performance figures are based on gross weight, standard sea level, no wind conditions, unless otherwise specified.

SPECIFICATIONS

Number of Seats 6	Fuel Capacity (Usable) ..... 522 lbs/87 gal
Ramp Weight ..... 4016 lbs	Engine (Turbocharged) ..... 310 hp
Max. Useful Load ..... 1779 lbs	Baggage Allowance ..... 240 lbs

Remarks: Factory installed options may include weather radar and allow flight into icing conditions.

CRUISE

Note: All range and endurance specifications allow a reserve of 45 minutes at stated power.

Service Ceiling ..... 27,000 ft

Maximum Performance (10,000 ft)
- Cruise Speed ..... 176 kts
- Range ..... 685 nm
- Endurance ..... 4.0 hrs
- Fuel Flow ..... 105 lbs/hr

Economy Performance (10,000 ft)
- Cruise speed ..... 126 kts
- Range ..... 900 nm
- Endurance ..... 7.2 hrs
- Fuel Flow ..... 62 lbs/hr

TAKEOFF

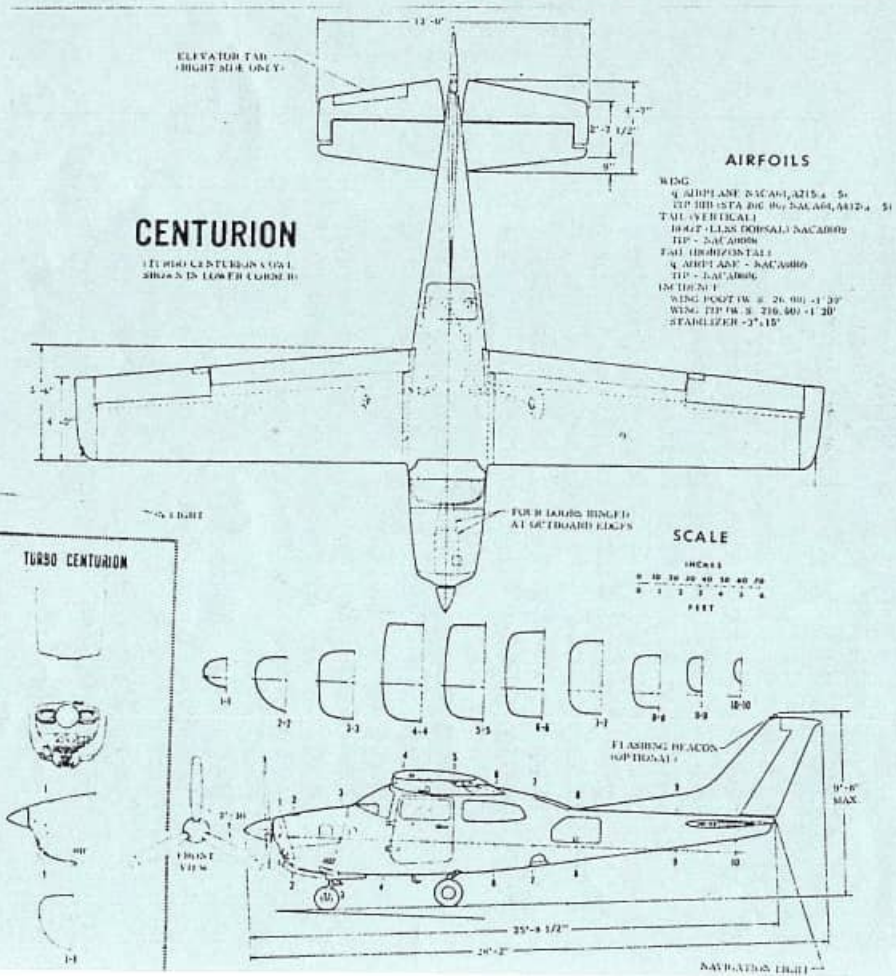
Takeoff Ground Roll ..... 1300 ft
Over 50 ft obstacle ..... 2160 ft
Rate of Climb ..... 930 ft/min
Climb Gradient ..... 572 ft/nm

LANDING

Demonstrated Crosswind Velocity* ..... 21 kts
Approach Speeds
- Flaps Up ..... 80-90 kts
- Flaps Down ..... 70-80 kts

Stall Speeds
- Flaps Up ..... 67 kts
- Flaps Down ..... 58 kts

Landing Ground Roll ..... 765 ft
Over 50 ft Obstacle ..... 1500 ft



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