COMBUSTION SYSTEM CATALYST

IMPROVE PERFORMANCE • REDUCE EMISSIONS • IMPROVE MILEAGE

Aeronautical Study Results

Plane Type: Type experimental (similar to Piper PA - 14)
Engine Type: Lycoming IO - 360 9.5 to 1 compression.
Propeller: Fixed pitch prop 84" 46 pitch.

Time of Year: Summer and ambient temp. + or - 10 F with base line 50 f.
Dosage/Fuel: 1 EcoSave tablet per 25 gallons, 100 low lead gasoline

Results:

1. 1. Test was at a constant 3000 ASL 2400 rpm. 1380 f exhaust temp. This is important because ALL CONDITIONS CHANGE DUE TO ALTITUDE. (air density, temperature, etc.)

2. Change was noted at 3000 feet 2400 rpm. This is important as all conditions change due to alt. change.

3. Two tests were conducted with the same results. (With ten hours run time without EcoSave to "uncondition" the fire deck for the second test.)

4. At a constant RPM, fuel mixture, and altitude the following was noted.
   RPM increase by 30 -50 rpm and exhaust temp decreased by 70 degrees F.

5. After noting changes, the following steps were taken:

- Reset RPM to 2400 by reducing the power settings.
- Note changes:
    a. Exhaust temperature dropped further [less fuel, less heat]
    b. Reset the exhaust temperature to the same temperature sure at the start of the test [1380°F]
    c. Fuel flow was once again noted. There was a .7 of a gallon flow reduction.
    d. Is translated into an 11.4% fuel savings.
- Sub note: It also appeared that there was more power/RPM at takeoff.