

WRAP Meeting

MON 03 DEC 2007

FAA Wings

- ◆ Kathy Martin (FAA) visiting 10 DEC
- ◆ Next Safety Meeting 07 JAN 2008

Hats

- ◆ Larry passed around logo
- ◆ We took a vote, the grey hat won
- ◆ We need 24 orders for hats
- ◆ We're going to order 25 hats
 - ◆ Pay Sam Andrews \$15 for a hat

NYC Hudson VFR Corridor Fly-Out

- ◆ Best one so far, 7 planes, 22 people
- ◆ Thousand Island 2nd best (weather)
- ◆ Next fly-out in March (LNS, breakfast, tower tour, pilot shop)
- ◆ April to IAD (Udvar-Hazy Smithsonian)

Membership

- ◆ Pat & Jim putting together form
- ◆ More members for committee?
 - ◆ Maybe after the holidays
 - ◆ Volunteers welcome

Aviation Safety

- ◆ Starting airplanes in cold weather
- ◆ Aviation Safety article “Cold Hearted”

New FAA License

- ◆ Get one without your SSN on it (\$2)
- ◆ Keep your old one (dates will be different)
- ◆ Sign up with faasafety.gov
- ◆ Laminated license required by 2008
- ◆ Still no photos

Other Fly-Outs

- ◆ Lake Placid
- ◆ Luray Caverns

Hangar at DeGol

- ◆ We really don't know what's happening with the old hangar at DeGol

Program Tonight

- ◆ Break - pay for hats, cookies & milk
- ◆ Hudson River Fly-Out
- ◆ Mike is going to talk about wintertime engine pre-heat

Pre-Heating Engines

- ◆ Paw-Wawkee Airport, Aztec departed into IFR, 35-40 min. pre-heat, 10-15 min. delay on ground, crashed a few minutes into flight when both engines threw rods, temperature -15F

Why Pre-Heat?

- ◆ Warm the oil
 - ◆ so it will circulate
 - ◆ “normalizing the metals”
 - ◆ different metals —aluminum (cyl. head, case, pistons), and steel (crankshaft, cylinders)

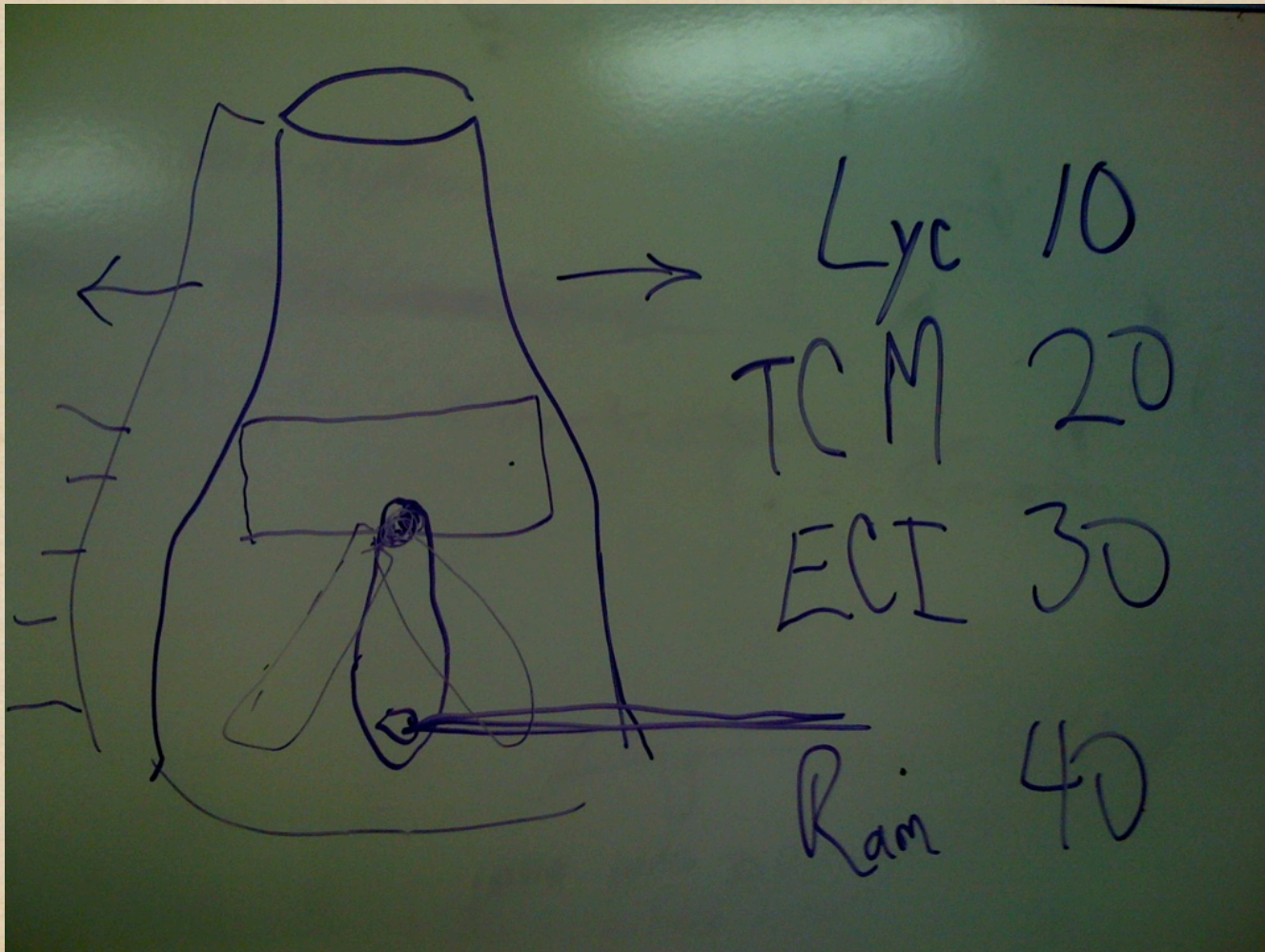
Clearances, Temperatures

- ◆ Parts are mated at room temperature
- ◆ Clearances measured in thousandths of an inch
- ◆ Oil Temperatures on takeoff in high 300s F (220 F cruise)

Expansion Rate

- ◆ Piston expands twice as fast as cylinder

Picture says 1000 words



When to Pre-heat

- ◆ Lycoming says at 10 F
- ◆ TCM says at 20 F
- ◆ ECI says at 30 F
- ◆ RAM says at 40 F

How to Pre-heat

- ◆ You've got a cold-soaked engine
- ◆ Plug in your pre-heater the night before
- ◆ Bathe the engine in warmth
- ◆ Conduction, not convection

Heaters

- ◆ Pan-heaters only may accelerate corrosion by causing “weather” inside your engine
- ◆ Use top-end heaters too
- ◆ Cover your cowl with a blanket or sleeping bag

Questions?

- ◆ Probe style: OK to leave on?
- ◆ Aviation Consumer said humidity dropped from 60% to 15% leaving heater on

Cockpit needs heat too

- ◆ Take care of your instruments, batteries
- ◆ Heat the hangar? (Too much leakage.)