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"The majority of aircraft accidents are due to some type of error of the pilot.
This fact has been true in the past and, unfortunately, most probably will be true in the future.

— Hugh Harrison Hurt, Jr., in the preface of his book Aerodynamics For Naval Aviators, NAVWEPS 00-80T-80, August 1959.



Tonight's Safety Topic



- Post-Maintenance Flights
 - After annual / condition inspection
 - After significant modifications
 - After extended down time
- 14 CFR 91.407 covers "Operation after maintenance, preventive maintenance, rebuilding, or alteration."



• 14 CFR 91.407

- Aircraft must be approved for return to service by an authorized person
- Maintenance record entries must be completed.
- May not carry pax until check flight is made and entered in records.
 - *Unless* it is 100% clear from ground testing that no changes to flight characteristics or aircraft operation are involved.



Pre-Flight Owner Actions

- Check for loose/missing inspection
 plates, missing screws, cowling fasteners
- Check flight controls for correct, stop-tostop movement, including flaps & trim.
- Check fuel level and drain sumps.
- Check doors, windows, inlets, etc.



Starting Owner Actions

- Check battery voltage
- Start engine.
- Oil pressure up within 10-25 secs
- Smooth idle
- EGT's on all cylinders come up
- Lean a lot
- Power up the avionics



Taxiing Owner Actions

- Check brakes
- Check steering with small S-turns
- Check attitude indicator working, turn & slip, DG and compass
- Radios working
- Autopilot on and working



Run-Up Owner Actions

- Check brakes again
- Extra thorough mag check
- Cycle propeller 3X
- Check controls again
- Flaps and trim set for TO?



Functional Check Flight

- TO abort procedures in mind!
- Day, VFR only
- Plan on a few circles near airport.
- Check oil temp & pressure, CHTs
- Exercise avionics
- IF YOU SEE ANYTHING UNEXPECTED,
 RETURN AND LAND ASAP.



Last notes

- Pick up plane from shop during regular business hours.
- Avoid pick-ups on Fridays!
- Make sure you get the logs! (91.407 requirement) No IOUs!



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