# How to Survive A Ramp Check

#### Aircraft Operator Maintenance Responsibilities

Presented to:

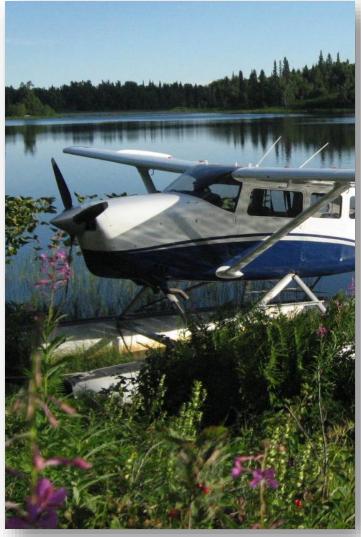
By:

Date:

Produced by AFS-850
The FAA Safety Team (FAASTeam)



#### Federal Aviation Administration



#### Welcome

- Exits
- Restrooms
- Emergency Evacuation
- Breaks
- Sponsor Acknowledgment
- Other information

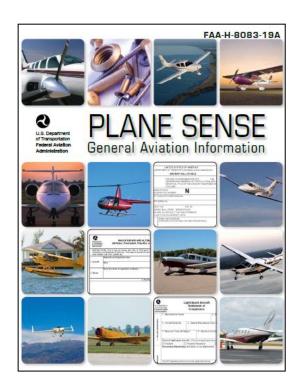


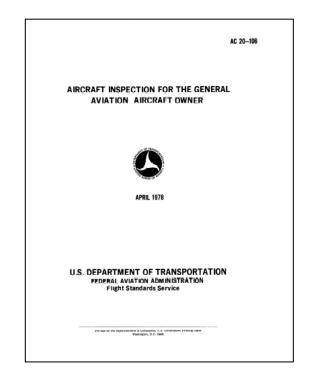
## **Objectives**

- Learn what airworthiness means
- Understand who is responsible for the airworthiness of the aircraft you fly.
- Know to carry out that responsibility.



## References

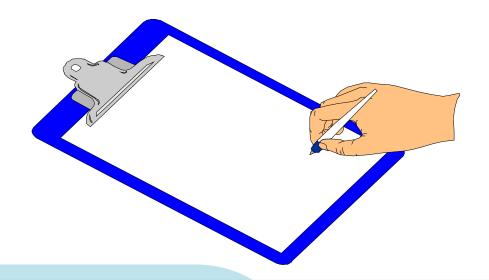






## What Ramp Check?

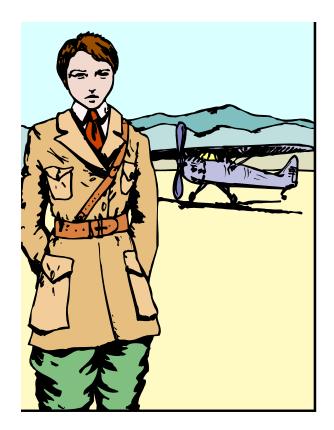
- Has anyone had the experience?
- Under what conditions do we check aircraft?
  - -Ramp Surveillance
  - -Investigation
    - Accident
    - Incident
    - Complaint
    - Violation





#### **Airworthiness FAR 91.7**

- No Person may operate a civil aircraft unless it is in an airworthy condition.
- The PIC is responsible for determining whether the aircraft is in a safe condition for flight and shall discontinue the flight when unairworthy conditions occur.





## **Operate FAR 1**

"Operate," with respect to aircraft, means use, cause to use or authorize to use aircraft, for the purpose (except as provided in 91.13 of this chapter) of air navigation including the piloting of aircraft with or without the right of legal control (as owner, lessee, or otherwise)



## **Operate FAR 1**

Means:

use Pilot

cause to use FBO/Aircarrier

authorize to use FBO

aircraft for the purpose of air navigation including the piloting of aircraft with or without the right of legal control (as owner, lessee, or otherwise)

Owner/FBO/Renter Pilot/Borrower/Thief



#### **Renter Pilots**

Is a renter pilot really responsible?

#### **TESTS**

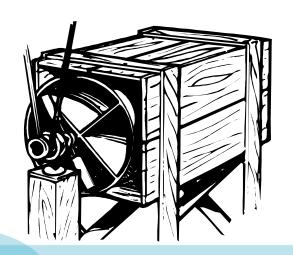
- -Known or Should Have Known
- -Reasonable and Prudent
- -Material, Relevant, Competent

www.ntsb.gov Legal Matters Opinions & Orders



## **Background**

- 1903 Orville and Wilbur Wright's first flight
  - -Importance of design
- 1926 Congress passes the Air Commerce Act
  - Establishes Aircraft Certification
- 1958 Federal Aviation Act
  - Recodified to U.S. Code Title 49
  - Current Public Law for Aviation





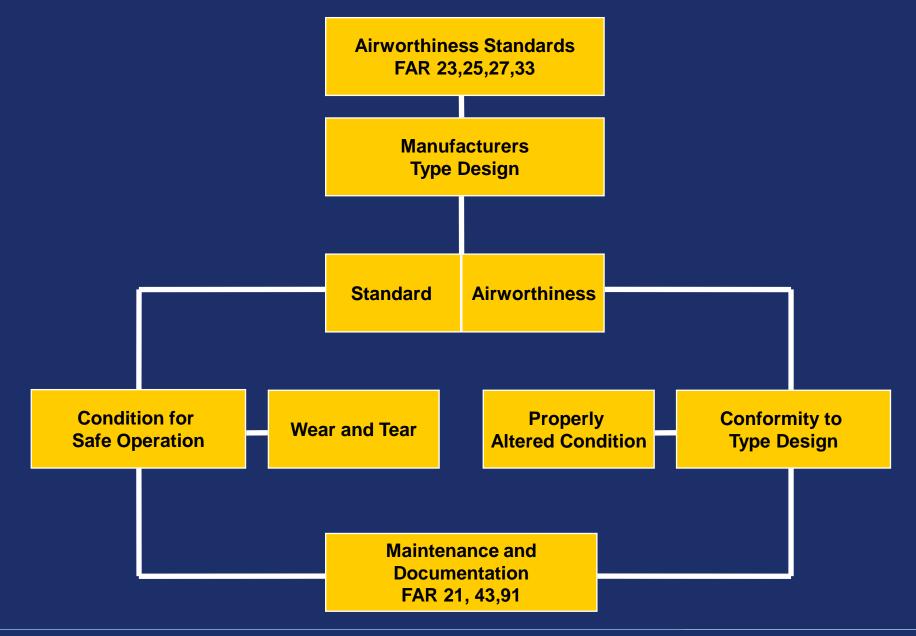
#### **Airworthiness Standards**

A list of requirements that make an aircraft safe

- -Seat Belts
- -Circuit Protection
- Master switch
- Carburetor Heat
- Lights
- -Placards
- Factor of safety

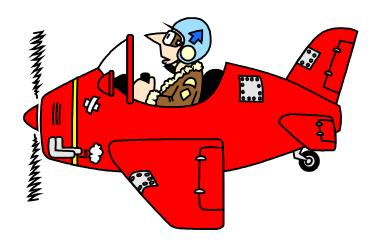








- Missing Stuff
- Added Stuff
- Documentation
- Condition
  - Wear and Tear
- Records





- Missing Stuff
  - Fairings
  - -Wheel pants
  - –Wing tips
  - -Spinners







- Missing Stuff
  - -Static discharge wicks
  - -Fuel cap chains
  - -Fill port placards
  - -Instruments

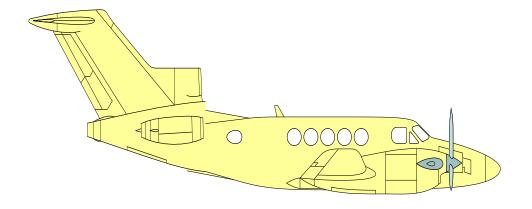


- Added Stuff
  - Cooling baffle seal
  - Fairings
  - STOL kits
  - Landing Lights
  - -Antennas





- Added Stuff
  - -Recent Paint Job
  - -Avionics
  - -Brackett air filters
  - -Instruments
  - -Unusual appliances
  - Proper Installation





#### **Documentation**

- Maintenance record entry
- FAA Form 337
- Equipment List
- Weight and Balance





- Condition/ Damage
  - -Dents
  - -Cracks
  - Working Rivets
  - -Broken Antennas
  - -Hangar rash
  - -Funky Repairs





- Condition/ Wear
  - -Bald tires
  - -Strut inflation
  - Propeller condition



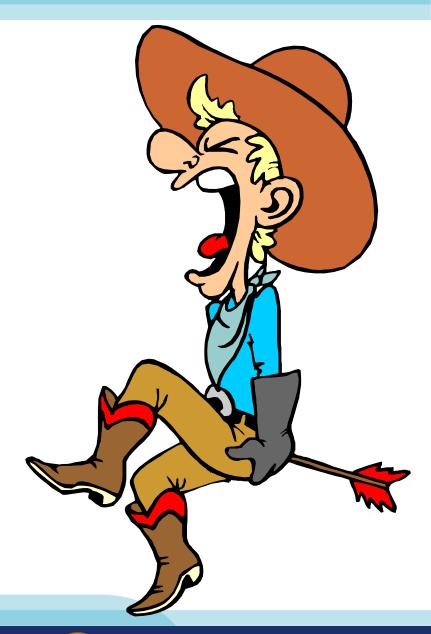


- Condition/ Wear
  - Deice boots / Hot Prop
  - -Hose condition
  - -Fluid leaks
  - -Fuel smell





- Interior
  - Registration
  - Airworthiness Certificate
  - Approved Flight Manual
  - Weight and Balance
  - Equipment list





- Interior
  - -Fire extinguisher
  - -Seat Belt TSO
  - -Compass correction card
  - -Placards
    - missing
    - unusual

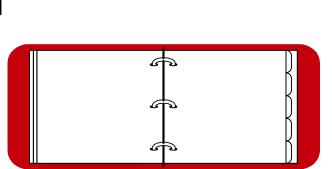








- Interior
  - Inoperative Equipment
  - -FAR 91.213
    - Cannot be required equipment
    - Must be removed or disabled
    - Placard installed
    - Maintenance recorded



ROLL

**AUTO PILOT INOP** 

A/P ON

A/P OFF

HDG ON

HDG OFF





Common Problems



- Unapproved Parts
- -100 Hour / Annual record entries
- Missing Placards
- -Seat Belt TSO
- -Out of date or missing equipment lists



- Common Problems
  - Undocumented Avionics Installations
    - Intercoms
  - Undocumented modifications
    - Instrument panel
    - Interior





### FAR 91.403 (a)

The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including AD compliance



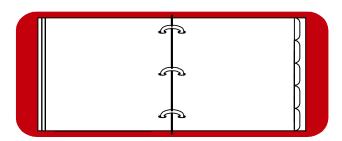
### FAR 91.405 (b)

 Each owner or operator of an aircraft shall ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service



#### FAR 91.417

Records inspection



- Maintenance records
  - Description of work performed
  - Date
  - Signature
  - Certificate number



#### FAR 91.417

- Records inspection
  - -Total time
  - -Status of life limited parts
    - Including time since overhaul
  - -Annual / 100 Hour Inspection entry
  - Airworthiness Directive status



#### FAR 91.417

- Records inspection
  - -337
  - -Static, Altimeter, Transponder certification (SAT)
  - -E.L.T. battery replacement due date
  - -FAR 91.207 (d) Annual ELT operational check



## Summary

- You should know what airworthiness means
- Who is responsible for the airworthiness of the aircraft you fly.
- How to carry out that responsibility.



## Safety Management Systems (SMS) Coming to General Aviation



https://www.faa.gov/about/initiatives/gasafetyoutreach



## **Questions?**

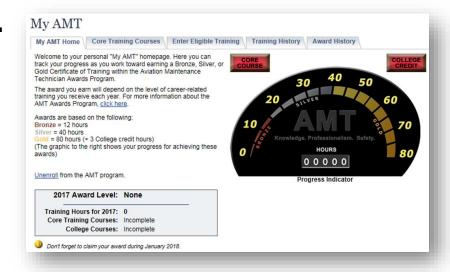




#### **Training and Peace of Mind**

- Technical Training
- Safety Related Training
- Document in My AMT







## Thank you for attending

You are vital members of our GA safety community





