



Federal Aviation
Administration

The National FAA Safety Team Presents

Topic of the Month September Preflight after Maintenance

Presented to: Safety Minded Aviators, Everywhere...

By: Stephen Bateman, CFI. AOPA Flying Clubs

Date: 26th September 2023

Produced by: **AFS 850**
National FAA Safety Team



Welcome

- **Steve Bateman, CFI, AOPA Flying Clubs, FAASTeam Lead Rep
Portland FSDO**
- **Your monthly 33-minute dose of aviation safety**
- **WINGS Credit: Yes...!**
- **Probably no time for questions, but please send me email:**
steve.bateman@aopa.org
Tel: 301 695 2356



So...

- **No recording...but even better...**
- **You can get the slides of this presentation for your own use!**
 - This and earlier ToM presentations are available...
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 - August edition 8/17/2023

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FLYING CLUBS | RUSTY PILOTS | FLIGHT TRAINING | HIGH

Home > Flying Clubs > Club Connector Newsletter

FLYING CLUB CONNECTOR NEWSLETTER

Your source for the latest news on flying clubs all over the country. AOPA's research has shown us that flying club leaders are hungry to learn more about the practical experiences of other clubs. So, we have created this monthly e-newsletter.

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ARTICLES BY TOPIC

NEWS FROM HQ	QUESTION OF THE MONTH	CLUB SPOTLIGHT
AIRCRAFT SPOTLIGHT	SAFETY	EVENT SPOTLIGHT

CLUB CONNECTOR ARTICLES

[NARROW RESULTS](#) ▾



Check NOTAMS!



5:37 AM Sun Sep 3

VFR & Category FPL

N761GG S33 S39

Aircraft Basic Perform...Profile

4,500'

Dist 25 nm ETE 0h20m ETA - Fuel 3.1 g Wind 3 kts head

5:25 AM PDT Internet Traffic

Map Info TFR

TFR ZSE 3/5032 TFR (2013-5032-1)
Sep 2, 8:10 PM - Sep 29, 8:00 PM PDT (FAA)
Active, Surface - 9,000' MSL

TO PROVIDE A SAFE ENVIRONMENT FOR FIRE FIGHTING ACFT OPS

Point-of-Contact Frequency: 118.075
Point-of-Contact Phone: 541-225-6400

IFDC 3/5032 ZSE OR..AIRSPACE 45NM E EUGENE, OR..TEMPORARY FLIGHT RESTRICTIONS WI AN AREA DEFINED AS
441800N1221630W (DSD256042.0) TO 442200N1220800W (DSD263036.4) TO 442200N1220000W (DSD265030.8) TO 440400N1220000W (DSD232032.1) TO 440430N1220300W (DSD234034.0) TO 440645N1220445W (DSD238034.5) TO 441000N1221630W (DSD245042.2) TO POINT OF ORIGIN SFC-9000FT TO PROVIDE A SAFE ENVIRONMENT FOR FIRE FIGHTING ACFT OPS. PURSUANT TO 14 CFR SECTION 91.137(A)(2) TEMPORARY FLIGHT RESTRICTIONS ARE IN EFFECT. EUGENE DISPATCH CENTER TEL 541-225-6400 OR FREQ 118.075/LOOKOUT FIRE IS IN CHARGE OF THE OPS. SEATTLE /ZSE/ ARTCC TEL 253-351-3698 IS THE FAA CDN FACILITY. 2309030310-2309300300EST

SEP 3 5:25 AM PDT -57m -47m -37m -27m -12m

Track Course Next Groundspeed GPS Altitude ETE Next Nearest Baro (KRDM)

141°M 0 kts 2,925' 30.03

Airports Maps Plates Documents Imagery Flights ScratchPads More



Federal Aviation Administration

General Aviation Joint Safety Committee (GAJSC) & FAA Accident Study Findings

...although the maintenance personnel made the initial mistake, the pilot could have prevented the accident by performing a thorough or advanced preflight check.



The 32nd Joseph T. Nall Report

Figure 1.4: General Aviation Accidents in 2020
2020 Non-commercial fixed-wing



	Accidents		Fatal Accidents	
Pilot-Related	614	69.1%	79	51.6%
Mechanical	153	17.2%	14	9.2%
Other / Unknown	122	13.7%	60	39.2%

- **“Pilot-Related” and “Mechanical” could include accidents due to inadequate pre-flight inspections**

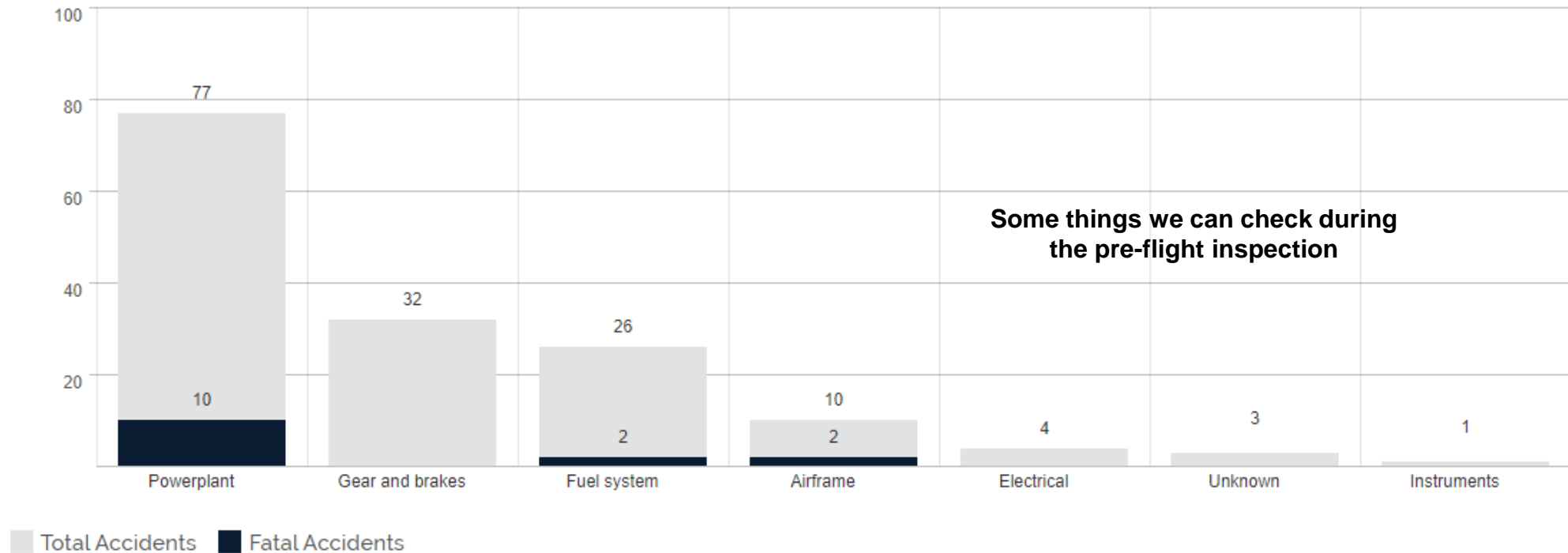
<https://www.aopa.org/training-and-safety/air-safety-institute/accident-analysis/joseph-t-nall-report>



The 32nd Joseph T. Nall Report

Figure 1.8.2: Types of mechanical accidents

2020 Non-commercial fixed-wing



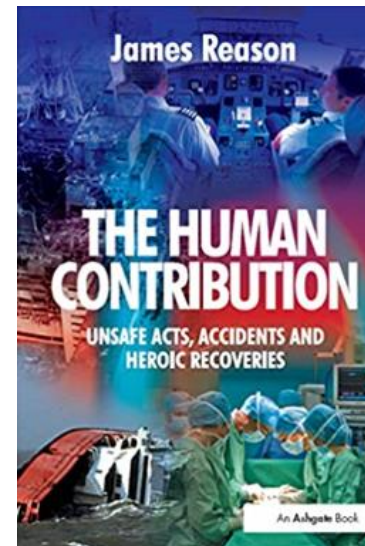
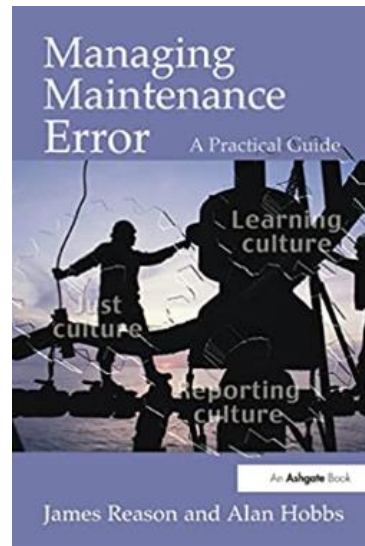
<https://www.aopa.org/training-and-safety/air-safety-institute/accident-analysis/joseph-t-nall-report>



Federal Aviation Administration

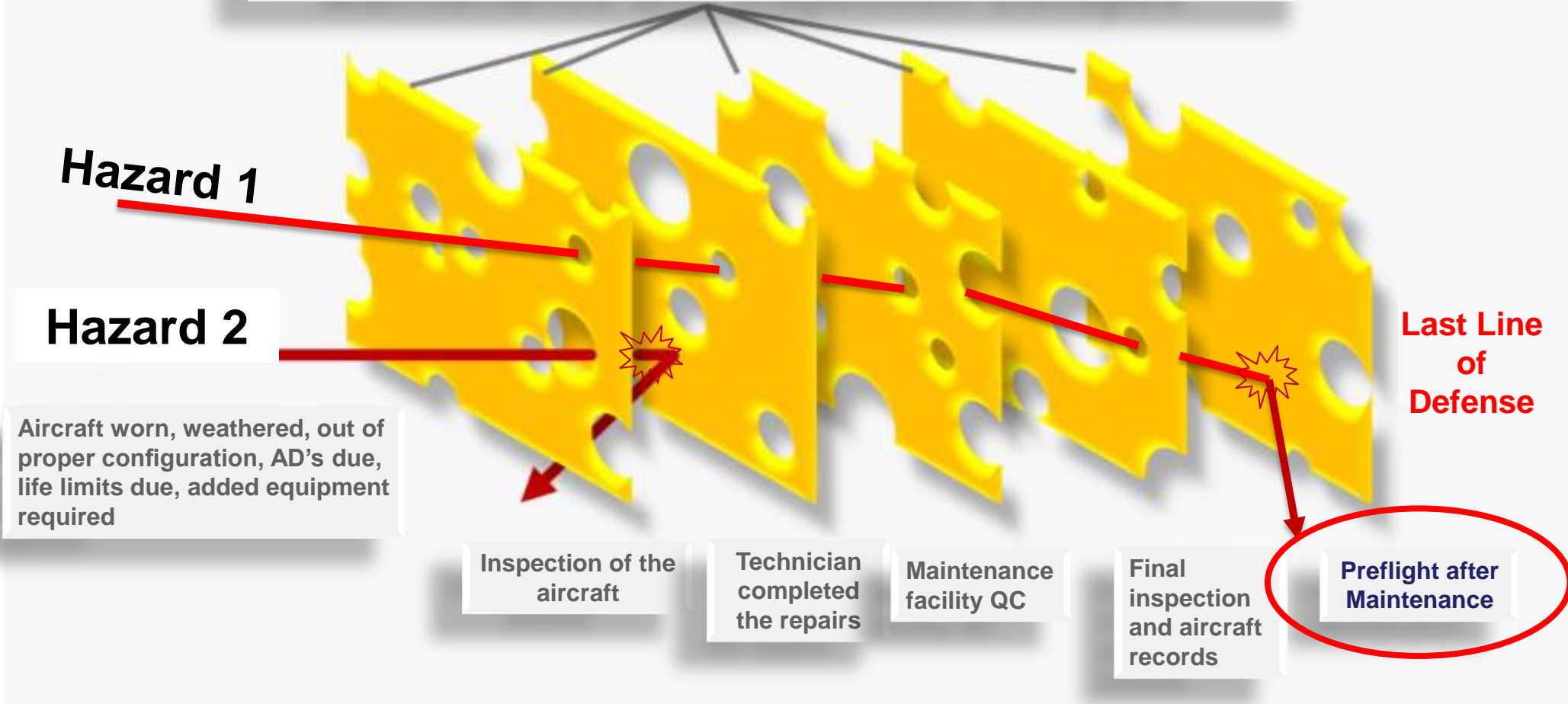
Responsibility

- You, the PIC, are the final authority to ensure airworthiness
- This remarkable responsibility requires serious thought and engagement...much more than a cursory glance whilst texting
- The pre-flight is the last line of defense



Responsibility: Swiss Cheese Model

Maintenance and Inspection Escapes



Maintenance Education - 1

- Even (**especially**) if you are outsourcing maintenance to a shop or independent A&P, you would be wise to have a solid knowledge of:
 - Your airplane(s)
 - Have copies of all manuals—Service Manuals, Illustrated Parts Lists, etc.
 - Read all of Mike Busch’s articles, webinars (AOPA and EAA) and books
 - Article/webinar examples:
 - *Is Engine TBO a myth?*
 - *Oleos*
 - *Making Metal*
 - *When to Overhaul*
 - *How to Flunk an Annual Inspection*
 - *Why I Hate Pulling Jugs*
 - *All about Oil*



Maintenance Education - 2

- **If you intend to do preventative maintenance, you should absolutely:**
 - Know what you legally can/cannot do (Part 43)
 - Be realistic about what you are able/capable of doing and your skills to do it
 - Have the right tools (*opportunity for more tools...!*)
 - Understand approved techniques and methods of maintenance and repair
 - Have copies of all manuals—Service Manuals, Illustrated Parts Lists



Mike Busch's Manifesto

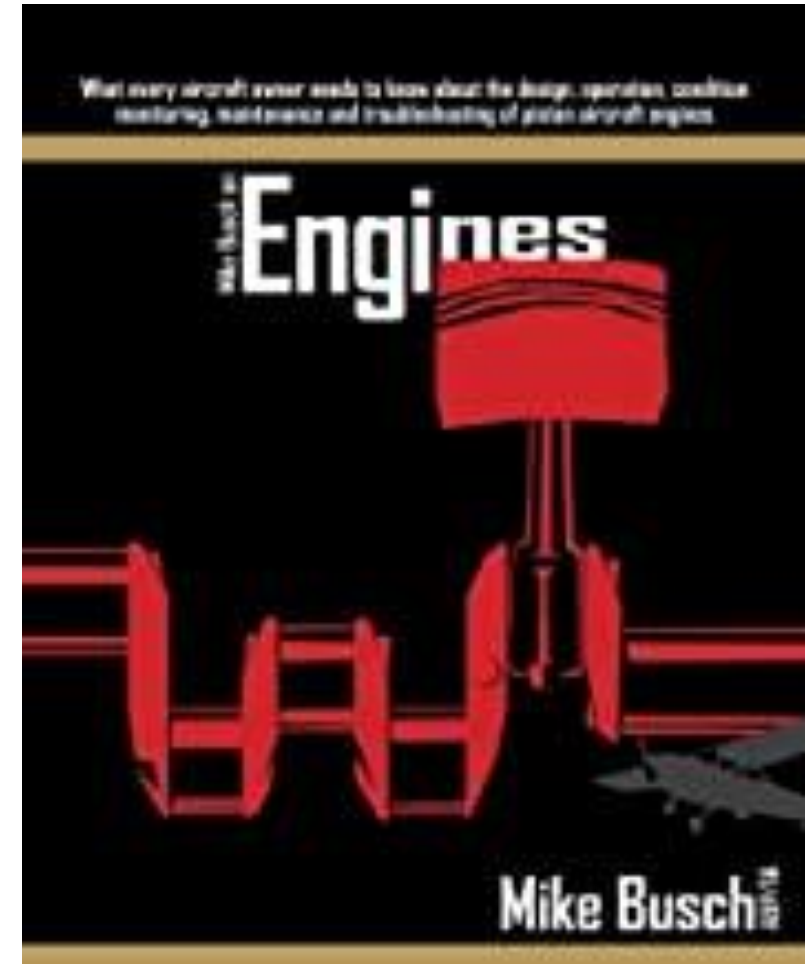
Owners are advised to perform the absolute least amount of maintenance required to make their aircraft safe, reliable and legal... and nothing more.



Mike Busch's Engines

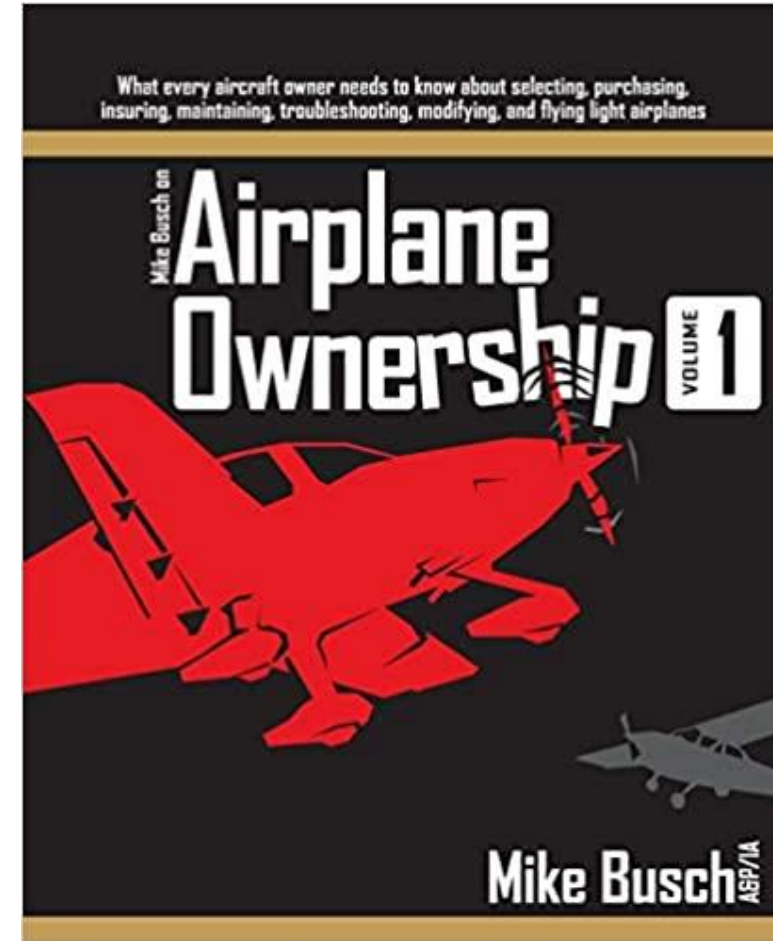
Much of what you have heard about engine operation is just plain wrong and not supported by the facts.

...you should overhaul and repair your engine on the basis of need or "condition" and not based on arbitrary time intervals such as TBO.



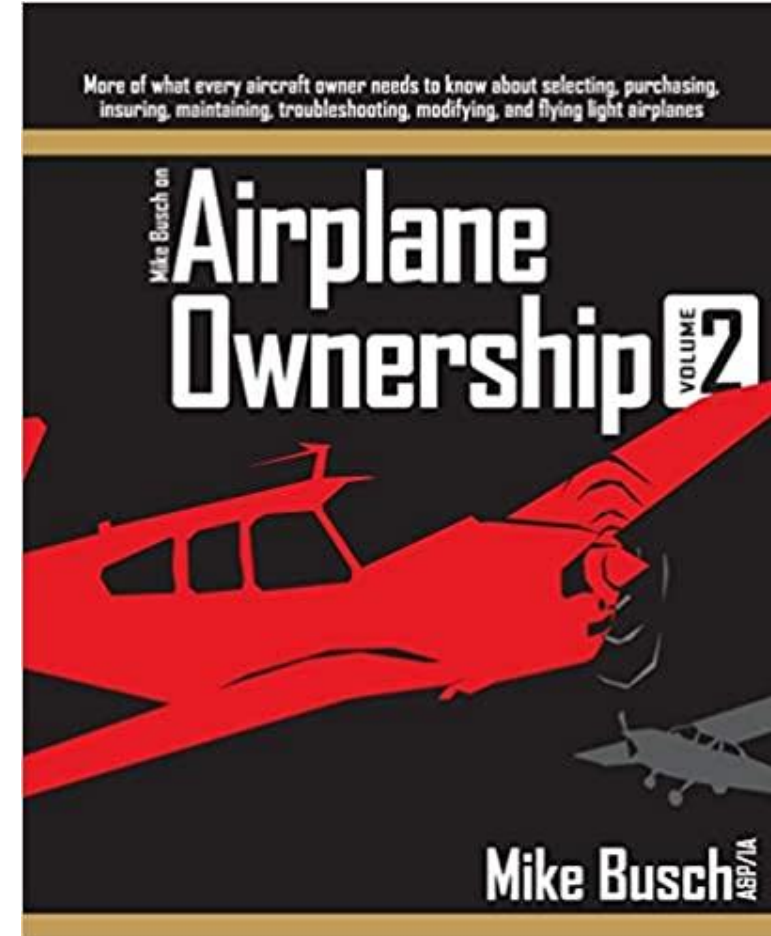
Mike Busch's Aircraft Ownership Vol. 1

- *Busch emphasizes that it is the aircraft owner/operator-not the mechanic-who bears the regulatory responsibility for airworthiness.*
- *He offers guidance about the all-important post-maintenance test flight, and how to deal with an owner's worst nightmare: a mechanical breakdown far from home.*



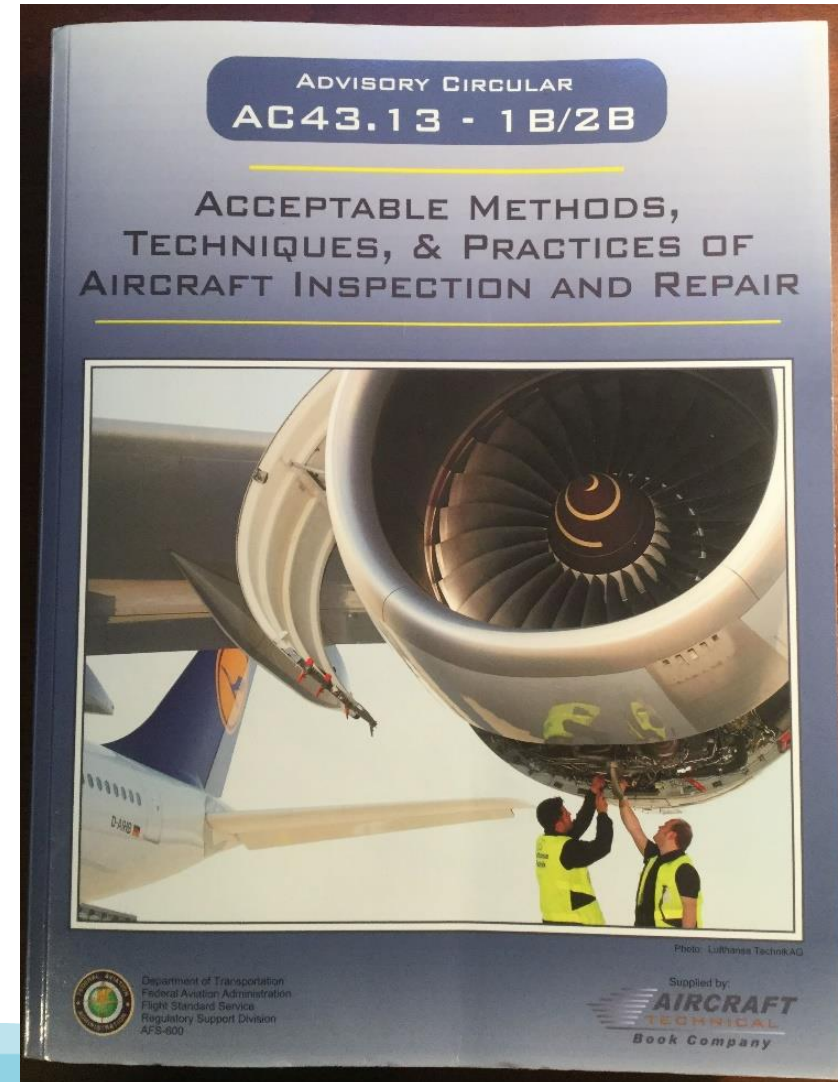
Mike Busch's Aircraft Ownership Vol. 2

- *Mike takes the reader on a guided tour through the various aircraft systems, discussing the operation, care and feeding of each one.*
- *The volume concludes with Busch's thoughts about the future of owner-flown general aviation and where we're headed.*



Other Titles for Your Maintenance Library

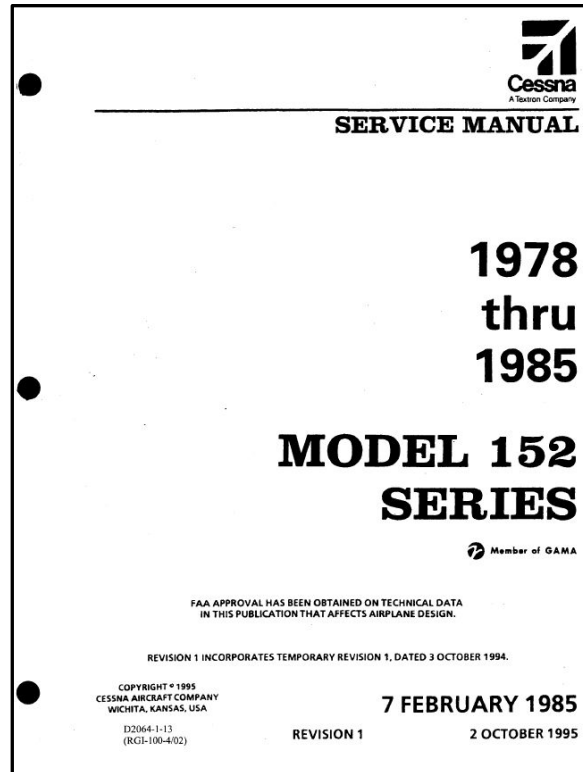
- **AC 43.13 1B/2B**
- **A “must” for your aviation library**
- **Curl up on the sofa and give it a solid read**
- **You WILL learn a lot!**



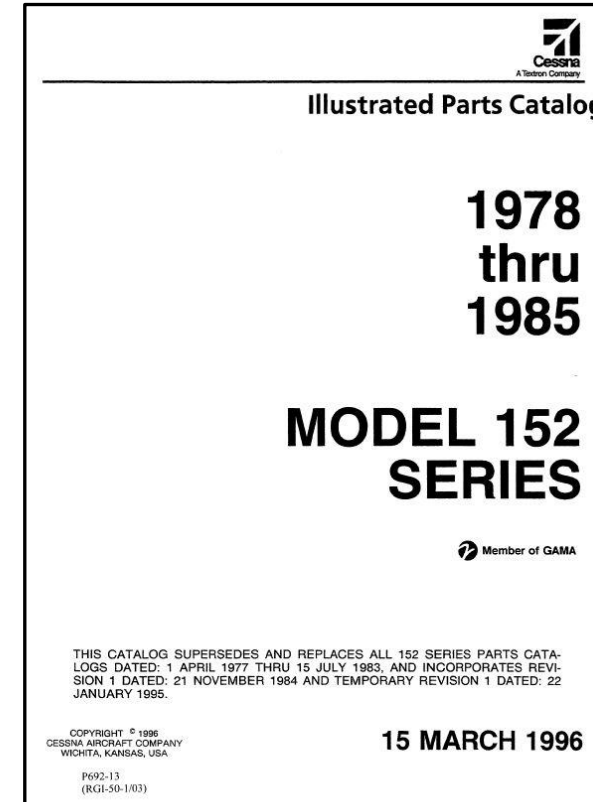
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Other Titles for Your Maintenance Library

Aircraft Service Manual



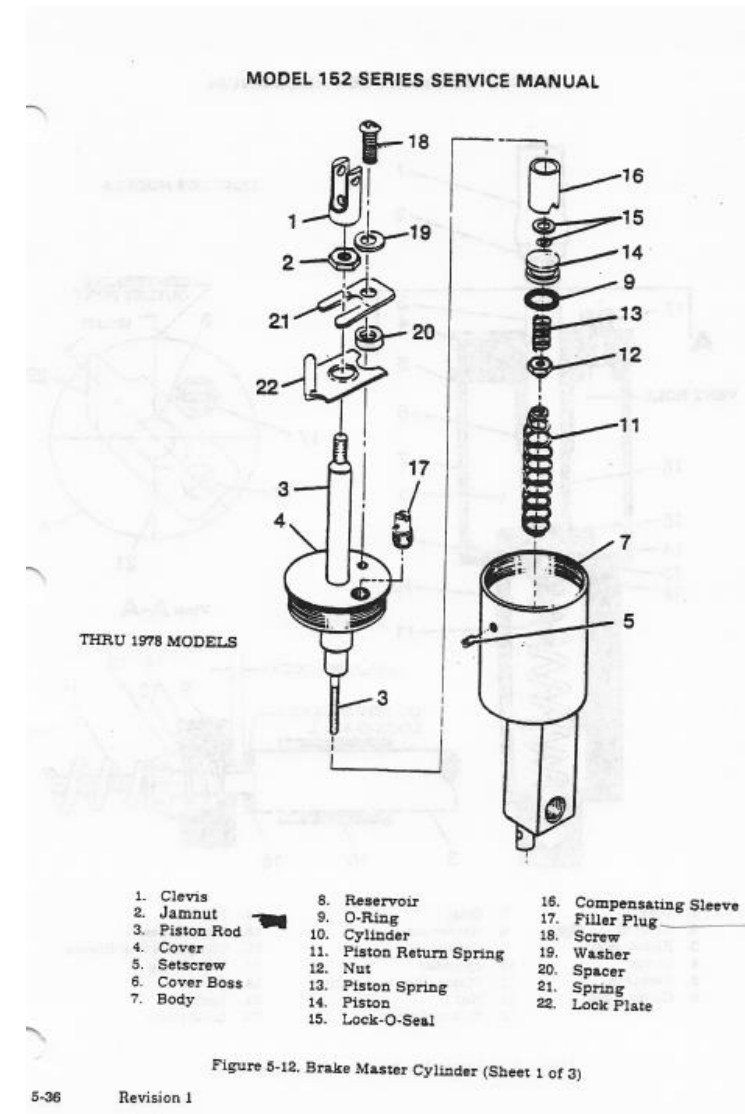
Illustrated Parts List



Federal Aviation
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Service Manual

- Aircraft Service Manual
- Description, remove, repair, assembly
- How it looks
- How it (should) go back together
- Allows you to cross-check work



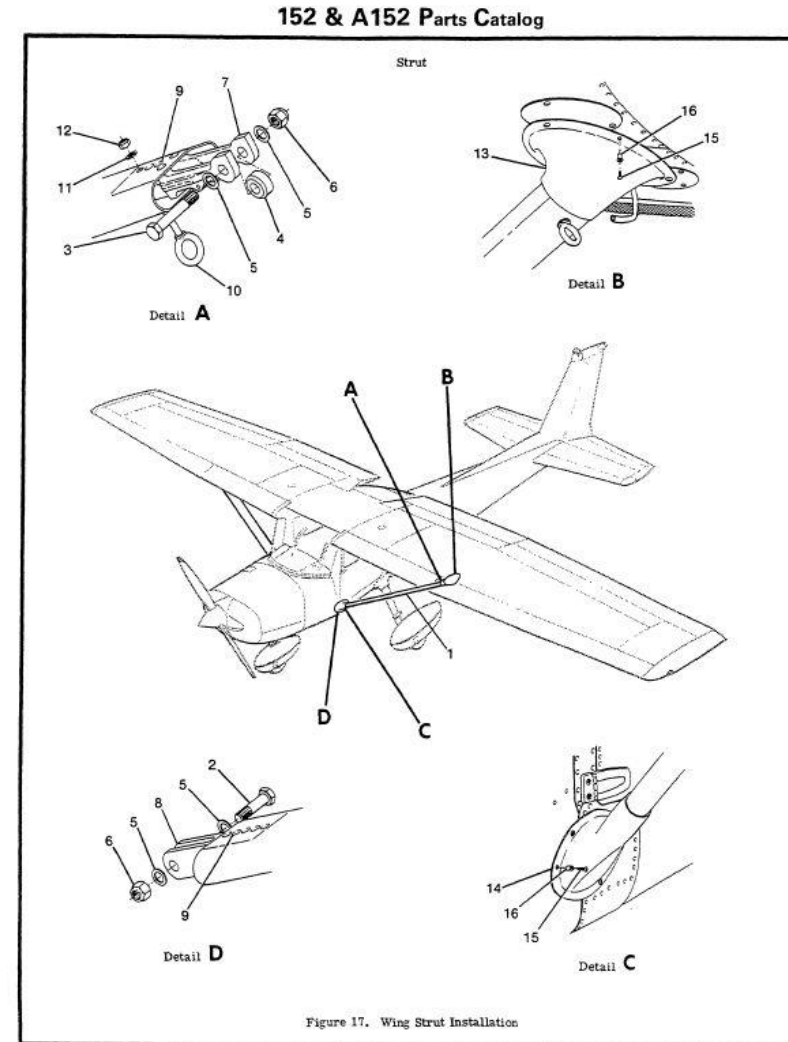
Example from Illustrated Parts List

- Part number
- Correct one listed in the logbook?
- PMA?
 - Parts Manufacturer Approval (PMA) is an approval granted by the FAA to a manufacturer of aircraft parts
- STC?
 - Supplementary Type Certificate
 - For example, different prop

152 & A152 Parts

FIGURE AND INDEX NO.	PART NUMBER	DE
17 -		1 2 3 4 5 6 7
- 1	0421000-1 0421000-7 0421000-2 0421000-8	WING STRUT INSTALLATION ---- STRUT ASSEMBLY-WING LH ---- STRUT ASSEMBLY-WING RH ---- STRUT ASSEMBLY-WING RH ---- ATTACHING PARTS
- 2	AN8-17A	BOLT ----
- 3	AN8-25A	BOLT ----
- 4	0523307	SPACER ----
- 5	AN960-816	SPACER ----
- 6	MS20365-820C	WASHER ---- NUT ----
- 7	0523614-1	FITTING-STRUT UPPER ----
- 8	0421001-1 0421001-3 0421001-2	FITTING-STRUT LOWER ---- FITTING-STRUT LOWER LH ---- FITTING-STRUT LOWER RH ---- ATTACHING PARTS
- 9	MS20470AD10-31	RIVET ----
-10	0523613-1	EYEBOLT-MOORING ----
-11	AN960-516	WASHER ----
-12	MS21042L5	NUT ----
-13	0522150-3 0522150-7 0522150-4 0522150-6	FAIRING-STRUT UPPER LH ---- FAIRING-STRUT UPPER LH ---- FAIRING-STRUT UPPER RH ---- FAIRING-STRUT UPPER RH ---- FAIRING-STRUT LOWER LH ---- FAIRING-STRUT LOWER LH ---- FAIRING-STRUT LOWER RH ---- FAIRING-STRUT LOWER RH ---- ATTACHING PARTS
-14	0421002-1 0421002-3 0421002-2 0421002-4	SCREW ---- RIVNUT ----
-15	AN515-8R8	
-16	NAS1329A08-75	

A---152 SERIAL 15279406 /
 F152 SERIAL F1520142
 B---A152 SERIAL A1520735
 FA152 SERIAL FA15203



Airworthiness: TCDS and STC

An aircraft with a Type Certificate (TC) is airworthy when:

- It conforms to its U.S. Type Certificate Data Sheet
- It is in a Condition for Safe Operation (CSO).

A non-type-certificated aircraft is airworthy when:

- It is in a Condition for Safe Operation (14 CFR Part 3.5)



Does Your Aircraft Have a Type Certificate?

- **TYPE CERTIFICATE DATA SHEET**

The type certificate data sheet (TCDS) is like a birth certificate, and provides a formal description of the aircraft, engine or propeller that has received type certification by the FAA. It lists limitations and information required for type certification including airspeed limits, weight limits, thrust limitations, etc.



Where to find the TCDS



Dynamic Regulatory System

A Comprehensive Knowledge Center of Regulatory and Guidance Material from the Office of Aviation Safety and other Services and Offices

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Type Certificate Data Sheet

- Design and Production Approvals
 - Type Certificate Data Sheets (TCDS)

Type Certificate Data Sheets (TCDS)

Filters

Status	TCDS Number	CFR Part Reference
Current	Enter text..	Choose
TC Holder	Office of Primary Responsibility	Sub-Status
Textron Aviation Inc.	Choose	Choose
Former TC Holders	Model	Product Type
Choose	152	Aircraft
Product Subtype	Revision Date	Regulatory Basis
Small Airplane	Type or Select a date/date range	Enter text..

Click "Enter" or use pipe (|) symbol to separate values

Keyword Search

Keyword

Enter text..

Click "Enter" or use pipe (|) symbol to separate values

Apply Reset

Sort By TCDS Number Save Results List Save Selected Results List

Indicates current

Showing 1 - 1 of 1 results

TCDS Number : 3A19

TC Holder: Textron Aviation Inc.

Status: Current | CFR Part Reference: Part 3 | Part 21 | Part 23 | Part 36 | Office of Primary Responsibility: AIR-7K0: Wichita ACO Branch | Sub-Status: | Former TC Holders: Cessna Aircraft Company | Model: 150L | 150B | 150D | A150L | A150K | 150E | A150M | A152 ...show more | Product Type: Aircraft | Product Subtype: Small Airplane | Revision Number: 50 | Revision Date: 07/21/2017 | Regulatory Basis: FAR Part 23 | CFR Subpart/Appendix Reference: | CFR Section Reference: Sec. 23.1545 | Sec. 23.1559



Federal Aviation Administration

TCDS for A152 Aerobat

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

	3A19
	Revision 50
	Textron Aviation Inc.
150	150J
150A	150K
150B	A150K
150C	150L
150D	A150L
150E	150M
150F	A150M
150G	152
150H	A152
	July 21, 2017

WARNING: Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes.

TYPE CERTIFICATE DATA SHEET NO. 3A19

This data sheet which is a part of type certificate No. 3A19 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.



Type Certificate Holder: Textron Aviation Inc.
One Cessna Boulevard
Wichita, Kansas 67215

Type Certificate Holder Record: Cessna Aircraft Company transferred to
Textron Aviation Inc. on July 29, 2015

- I. Model 150, 2 PCLM (Utility Category), Approved July 10, 1958**
Model 150A, 2 PCLM (Utility Category), Approved June 14, 1960
Model 150B, 2 PCLM (Utility Category), Approved June 20, 1961
Model 150C, 2 PCLM (Utility Category), Approved June 15, 1962

Engine	Continental O-200-A	
*Fuel	80/87 min. grade aviation gasoline	
*Engine Limits	For all operations, 2750 r.p.m. (100 hp.)	
Propeller and Propeller Limits	1. Sensenich 69CK Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting: not over 2470, not under 2320 No additional tolerance permitted	24 lb. (-32)
	2. McCauley 1A100/MCM Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting: not over 2475, not under 2375 No additional tolerance permitted	21 lb. (-32)
	3. McCauley 1A101/DCM Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting: not over 2600, not under 2500 No additional tolerance permitted	21 lb. (-32)

Yet more information about your specific aeroplane...N Number Registry

Lookup Aircraft By... ▾ Reports ▾ N-Numbers ▾ Other Aircraft Resources ▾			
FAA REGISTRY			
N-Number Inquiry Results			
Data Updated Each Federal Working Day At Midnight			
 			
N761GG is Assigned			
N-NUMBER ENTERED: 761GG			
AIRCRAFT DESCRIPTION			
Serial Number	A1520951	Status	Valid
Manufacturer Name	CESSNA	Certificate Issue Date	07/24/2018
Model	A152	Expiration Date	07/31/2024
Type Aircraft	Fixed Wing Single-Engine	Type Engine	Reciprocating
Pending Number Change	None	Dealer	No
Date Change Authorized	None	Mode S Code (base 8 / Oct)	52442734
MFR Year	1980	Mode S Code (Base 16 / Hex)	AA45DC
Type Registration	LLC	Fractional Owner	NO
REGISTERED OWNER			
Name	CHOCKS AWAY AVIATON LLC		
Street	6679 STONE RIDGE CT		
City	FREDERICK	State	MARYLAND
County	FREDERICK	Zip Code	21702-2989
Country	UNITED STATES		
AIRWORTHINESS			
Type Certificate Data Sheet	None	Type Certificate Holder	None
Engine Manufacturer	LYCOMING	Classification	Standard



Yet more information about your specific aeroplane ...

AIRWORTHINESS


Type Certificate Data Sheet	None	Type Certificate Holder	None
Engine Manufacturer	LYCOMING	Classification	Standard
Engine Model	0-235 SERIES	Category	Acrobatic
AW Date	09/05/1980	Exception Code	No

The information contained in this record should be the most current Airworthiness information available in the historical aircraft record. However, this data alone does not provide the basis for a determination regarding the airworthiness of an aircraft or the current aircraft configuration. For specific information, you may request a copy of the aircraft record at <http://aircraft.faa.gov/e.gov/ND/>

The information contained in this record should be the most current Airworthiness information available in the historical aircraft record. However, this data alone does not provide the basis for a determination regarding the airworthiness of an aircraft or the current aircraft configuration. For specific information, you may request a copy of the aircraft record at <http://aircraft.faa.gov/e.gov/ND/>



Yet more information about your specific aeroplane ...Huh...CD or Paper?



Federal Aviation Administration

Aircraft Records

- Aircraft Registration
- Aircraft Inquiry
- Contact Aircraft Registration
- FAQ
- Registry
- Request Aircraft Records
- Home

Request for Copies of Aircraft Records Entry Screen

For more information about requesting copies and a schedule of fees [click here](#).

Do you want these records on? CD Paper

Do you need these records certified? [What is Certified?](#) Yes No

Is this for a Government entity? Yes No

N-Number: Serial #:



Airworthiness Certificate is Necessary But Not Sufficient

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION-FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

6. TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 21, 43, and 91, of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE

FAA REPRESENTATIVE

DESIGNATION NUMBER

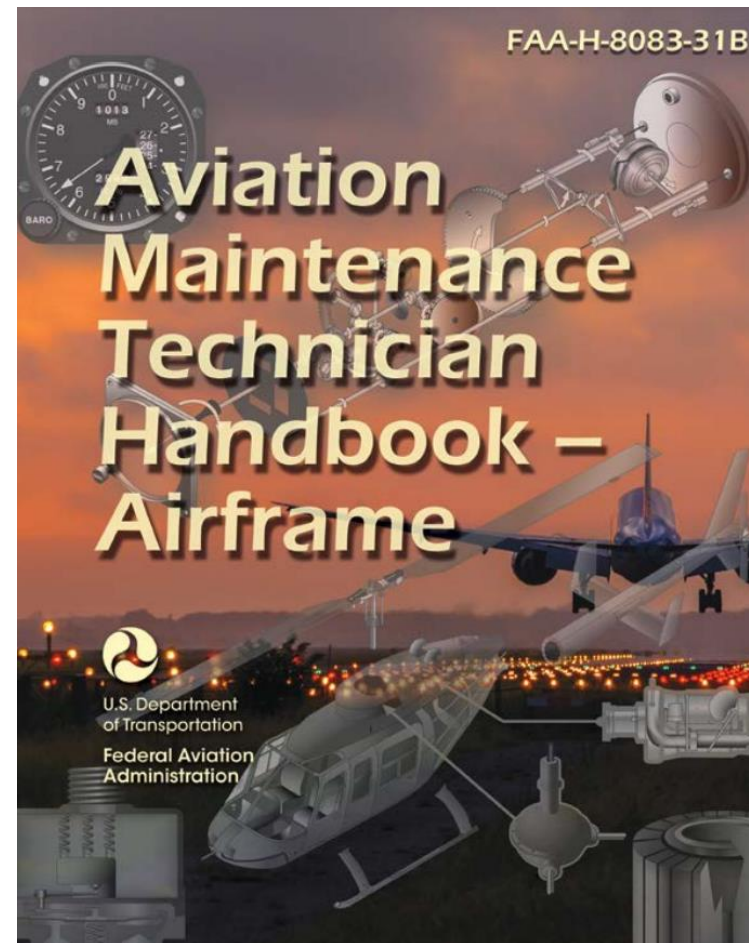
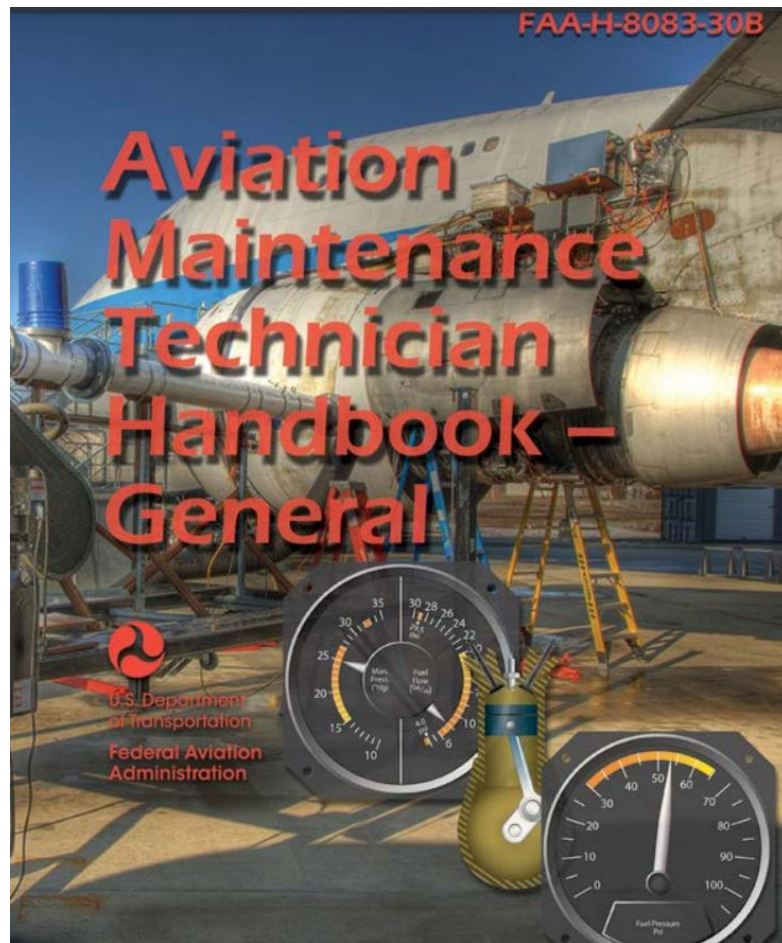
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.
THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 8100-2



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Become Educated: Want More...?



Federal Aviation Administration

Become Educated: Part 43

- **FAR 43.3 permits a pilot to perform preventive maintenance on an aircraft provided the aircraft is used strictly for noncommercial operations under Part 91**
- **Pilots > PPL may do this all by themselves without any A&P involvement...Umm...**
 - Just because you can, doesn't mean you should
 - Be careful what you wish for...
- **Wise to have someone else watch or double check—more eyes find more things**



Maintenance and Inspections

- **Maintenance:**

- Preventative = Stop things going wrong
- Corrective = Fix things that went wrong
- Involves taking things apart and perhaps replacing things
- May have to remove other things to get to the thing

- **Inspections:**

- Can be equally invasive
- Look at the planes Service Manual and...
- [FAR 43 Appendix D](#)
- Helps you know what should've been poked and prodded

- **Service Bulletins and ADs**

- Part 91 not *required* to conform to SBs...but understand them!
- LSAs are required to conform to manufacturer's SBs
- Everyone must comply with FAA issued ADs

MODEL 152 SERIES SERVICE MANUAL

		TYPE OF INSPECTION	
		3. PROGRESSIVE/INTERVAL HRS.	
		2. SPECIAL	
		1. 100 HR/ANNUAL	
13.	Compression check	•	200
14.	Crankcase and vacuum system breather lines	•	200
15.	Electrical wiring	•	100
16.	Vacuum pump	•	100
17.	Vacuum relief valve filter	•	20 100
18.	Engine controls and linkage	•	5 100
19.	Engine shock mounts, mount structure and ground straps	•	200
20.	Cabin heat valves, doors and controls	•	200
21.	Starter, solenoid and electrical connections	•	100
22.	Starter brushes, brush leads and commutator	•	6 500
23.	Alternator mounting bracket	•	100
24.	Alternator, belt and electrical connections	•	15 100
25.	Alternator brushes, brush leads, commutator or slip ring	•	6 100
26.	Voltage regulator mounting and electrical leads	•	18 100
27.	Magnetos (externally) and electrical connections	•	23 200
28.	Magnetos (internally)	•	7 100
29.	Magneto timing	•	100
30.	Carburetor and drain plug	•	200
31.	Firewall	•	100
32.	Engine cowling	•	14 200
33.	Tappet clearance	•	21 200
34.	Vacuum system central air filter	•	
FUEL SYSTEM			
1.	Fuel strainer, drain valve and control	•	100
2.	Fuel strainer screen and bowl	•	100
3.	Fuel tank vents, caps and placards	•	100
4.	Fuel tanks, sump drains and fuel line drains	•	100
5.	Drain fuel and check tank interior, attachment and outlet screens	•	4



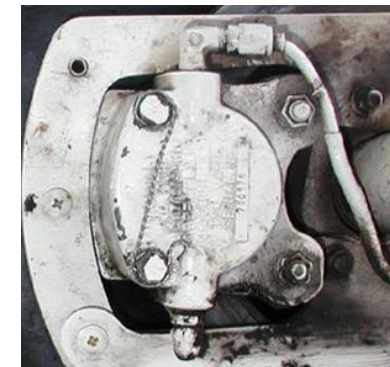
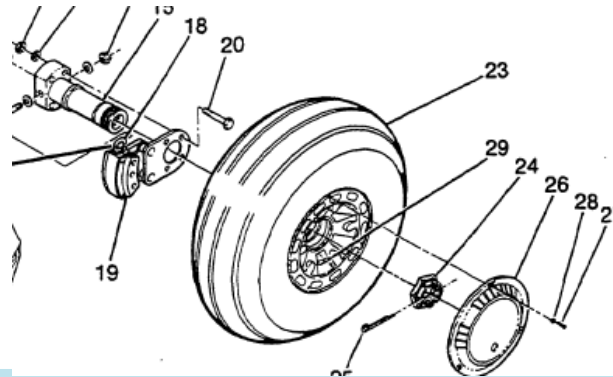
After Maintenance and Inspections...

- **If the plane has been “returned to service” ...mechanic thinks it is ready to fly...but whose butt is in the seat?**
- **Ask the mechanic if they would like to go for a ride after maintenance...**
 - Confidently climbs in, or removes the cowls for just one more check...?
- **At this point we must become detailed “Forensic Detectives”**
 - What should have been done?
 - What was actually done?
 - What work was required to get at the part that was inspected/replaced?
- **Not all “work” may be listed in the logbooks**
 - Helps to know your plane, so you can “reverse engineer” a work task
 - Example: Greasing wheel bearings involves removing brake calipers, wheel, the bearings...description may just be “Greased wheel bearings IAW service manual...”
 - Service, illustrated parts and maintenance manuals give you big clues as to what was “disturbed”
 - You should be checking the “chain” not just the end task!



Pre-Flight Checklist After Maintenance

- **Change the mind set**
 - No-Go/Go
 - Start with the assumption that the A/C is not airworthy. Your task is to show that it is...
 - Checklist...safety wire in place. But is it correct?
- **Checklist gives you a guide and “sequential flow” to help prevent missing things**
- **Only useful if you follow it AND apply detective-work – ADVANCED preflight!**
- **“Check Left Main Wheel”**.
 - If it was removed, we should take off the hub cap and ensure there is a spit pin through the axle and castellated nut
 - We must also check the brake caliper safety wiring – in place and correct



Pre-Flight Checklist After Maintenance

- **Get it? Need to do an ADVANCED PREFLIGHT based on not just what was done, but what was touched *and* impacted**
- **Pre-flight is the last, independent chance to check before becoming “Chuck, the Test Pilot”**
- **Tip: Get into the habit of smelling your airplane. Develop a baseline so you can sniff-out differences:**
 - You can smell around corners...
 - Oil, acid, hydraulic fluid, electrical smells...
 - Understand every new smell



**Do NOT Assume the part(s) replaced
are the ONLY parts removed**

Turbo Commander 114

Issue: Magneto repair

**Task: Remove cowling, left hand
exhaust system, turbo charger,
and supplementary equipment
on the LH side of the engine for
access, remove magneto...**

What would you check?



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Do NOT Assume the part(s) replaced are the ONLY parts removed

Cessna C172

Issue: Replace alternator belt

**Task: Remove cowling, remove
the propeller, loosen the
alternator, remove the belt,
reinstall...**

What would you check?

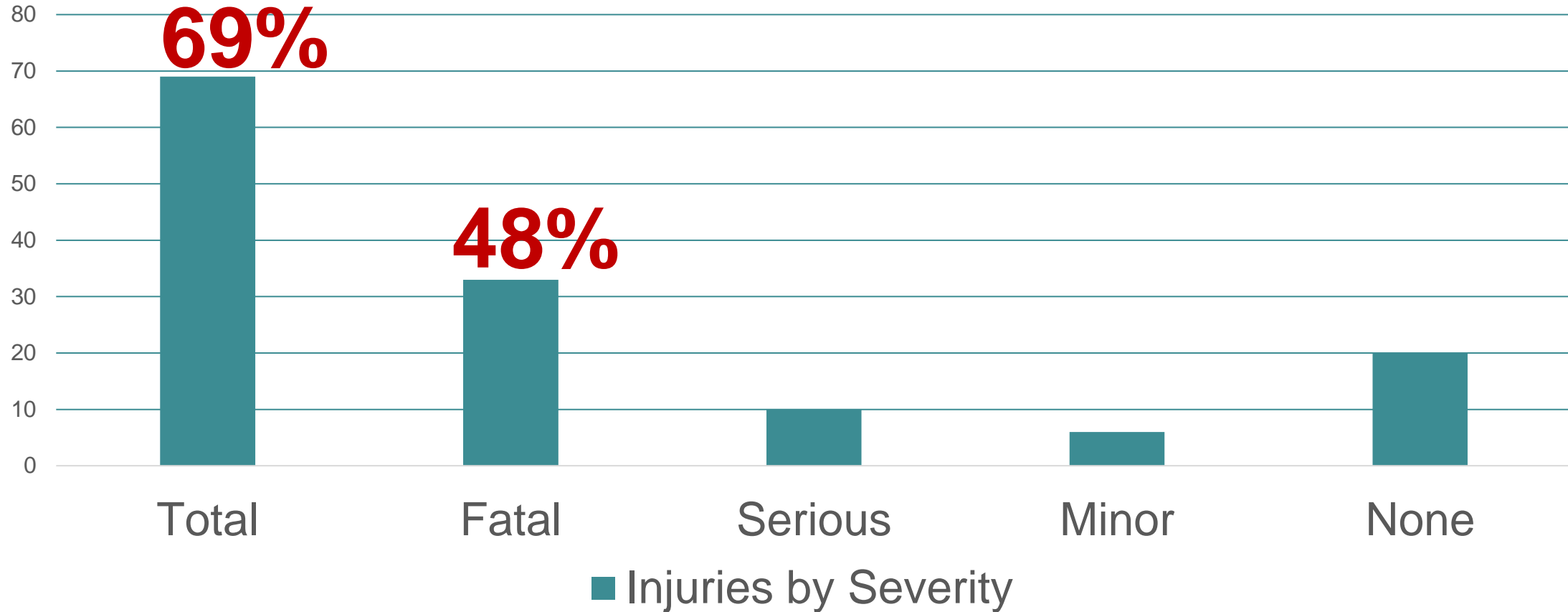


https://commons.wikimedia.org/wiki/Category:Cessna_172

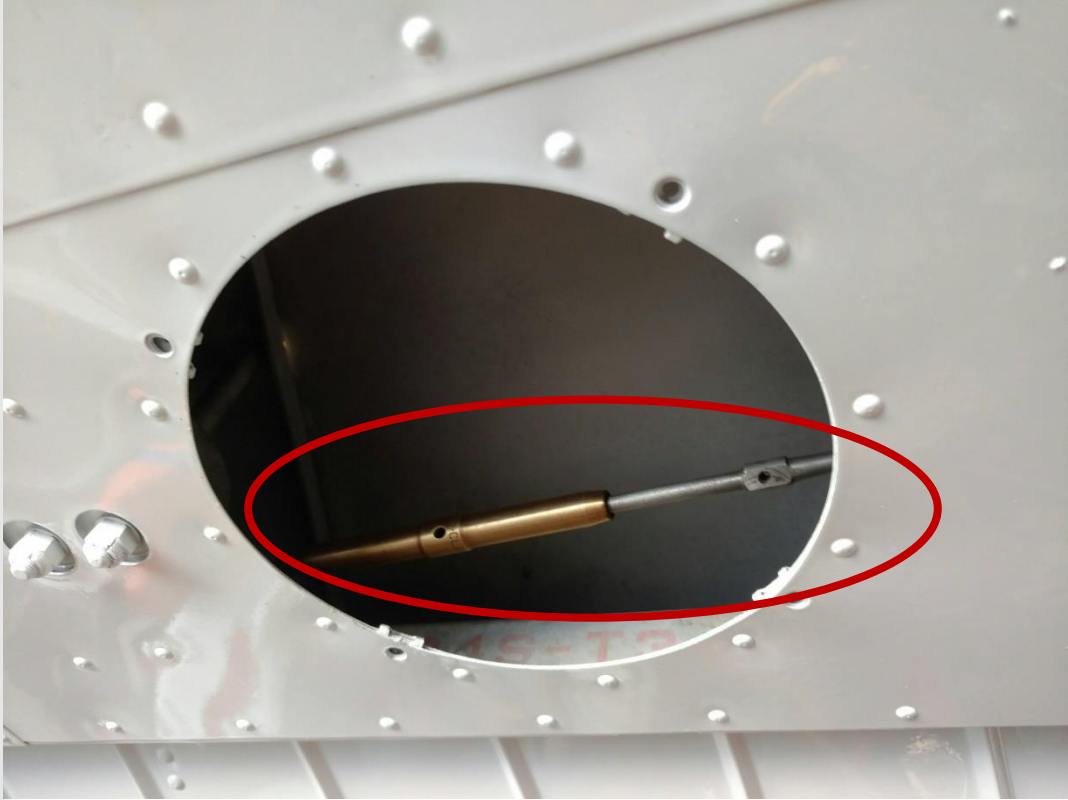


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NTSB Data: Control Lock as Causal Factor

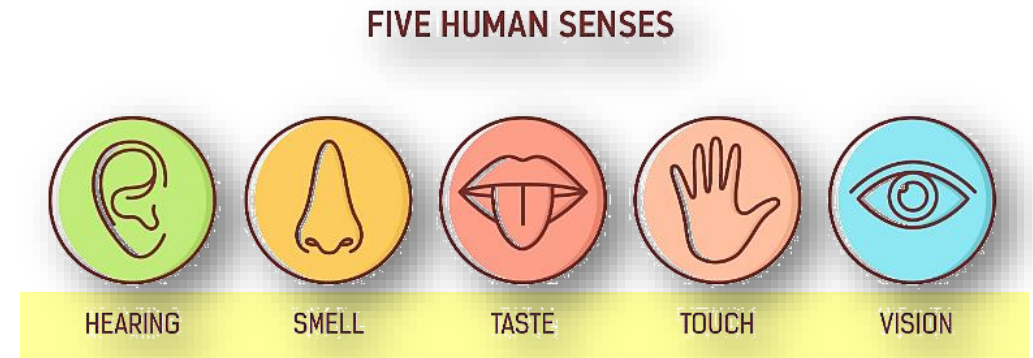


Make sure all inspection panels are secure and their fasteners are tight!



Tip: Use Your Senses

- Do you **SMELL** anything abnormal?
- Fuel, oil, acid, hydraulic fluid?
- Does it vibrate more than usual (**FEEL**)?
- Do you **TASTE** (or **SMELL**) burning electrical items?
- Step 10 to 15 feet back from the airplane, does anything **LOOK** out of place?
- Be prepared to abort takeoff if something goes wrong or doesn't feel right...oh, wait...always be prepared to abort!



Some Recent Preflight Discoveries



First Flight After Maintenance

- **Okay – first pre-flight “passed”**
 - **Next up is the first flight after maintenance**
 - **Will do a whole seminar on this topic in the future...**
 - **Make a plan and schedule...do this, then do that, then...**
 - **Please send me details of your process for first flights after maintenance**
-
- **From own experience (first flight after engine replacement..)....and from Art Bridge (and his Dad)...**



First Flight After Maintenance

- **Start, warm up and run-up the engine, cycle the propeller, operate all engine controls**
 - New engines are “tight” – watch for overheating
- **Shut down, remove cowlings and inspect...look, smell...**
- **High-speed taxi...request as necessary and be courteous**
- **Do another run up**
- **Request TO and climb over the runway to 2,000' AGL (explain why!)**
- **Do a few high patterns at altitude, checking the engine gauges, feel of controls, etc.**
- **If everything looks and sounds correct, circle for altitude then known route**
- **Fly airport to airport for possible unplanned landings**
- **On return, remove cowlings, look, smell.**
- **Later for leaks...**
- **Check all fasteners and retorque things than need retorquing**



What to plan for in 2024...

Join us for **“Preflight in a Box”** – an educational package that includes hands-on preflight of one or more aircraft...

“TELL US WHY THE AIRCRAFT SHOULD NOT BE FLOWN...”

FAASafety.gov users watch for a SPANS announcement soon or contact your local FAAS Team Program Manager for more information.



Resources

- **FAA Safety Briefing—Advanced Preflight After Maintenance:** <https://www.faa.gov/newsroom/safety-briefing/advanced-preflight-after-maintenance>
- **NTSB Safety Alert — Advanced Preflight After Maintenance:** <https://go.usa.gov/cK7Py>
- **FAA’s Advanced Preflight Pamphlet:** <https://go.usa.gov/xVy44>
- **“Advanced Preflight,” FAA Safety Briefing, Mar/Apr 2012:** <https://go.usa.gov/cK7ma>
- **Aviation Safety: “Stop the Rush”—** https://www.aviationsafetymagazine.com/risk_management/stop-the-rush/



Summary and Learning Points:

- **Responsibility – all yours...**
- **Participate in, or observe your mechanic perform maintenance and inspections**
- **Educate yourself—know your aircraft**
- **Know what “airworthy” really means**
- **Learn all you can about the maintenance that was performed**
- **Don’t assume the part(s) replaced were the only parts removed**
- **Peek behind inspection panels to know what hides there**
- **Pay attention to control positions. Unimpeded and correct direction? Requires thought!**
- **Make sure all inspection panels are secure and their fasteners are tight**
- **Check fuel tank for water, sediment, and proper fuel grade**
- **After an oil change, always check the engine oil level...**
- **Always check the logbooks and paperwork prior to flight to ensure the records have been entered...but even then, doesn't mean that they are correct...**



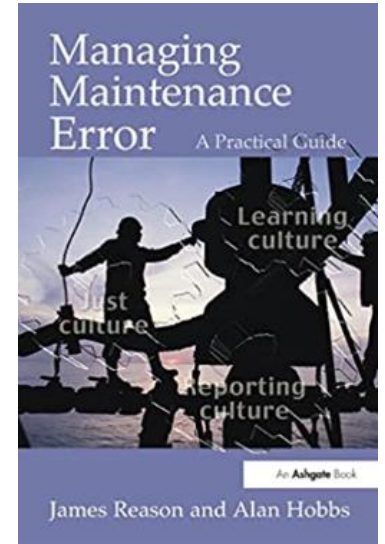
WINGS—Proficiency and Peace of Mind

- Fly regularly with your CFI
- Document in *WINGS*
- Proficient Pilots are:
 - Confident
 - Capable
 - Safe
- *WINGS* will keep you on top of your game
- Cheaper insurance, stay alive to enjoy it!



Homework-1: Education

- Read “Managing Maintenance Error”
- Get copies of your aircraft's maintenance manuals—**Airframe, Engine, Propeller:**
 - Illustrated Parts Manual
 - Service Manual
- Read Mike Busch’s books, and his articles in EAA Sport Aviation and AOPA Pilot magazines



Homework-2 (Overdue from last month)

- **New Human Factors Course—Ten Modules**
- **Log into faasafety.gov, go to activities-> courses-> all available courses**
 - Then scroll to find these ALC codes—one per module:
 - 730, 731, 732, 826, 827, 828, 829, 830
 - Here is a handy QR code to get you to modules 1 and 2:



Homework-3a: DRS and ADs

- **Learn how to use the FAA DRS**

- https://www.faa.gov/about/office_org/headquarters_offices/avs/programs/drshttps://www.faa.gov/about/office_org/headquarters_offices/avs/programs/drs/faq
- https://www.faa.gov/about/office_org/headquarters_offices/avs/programs/drs



Homework-3b: DRS and ADs

- Researching ADs Using the FAA DRS Website (*WINGS credit*)
 - Log in to Social Flight
 - Click on FAASTeam FAA Credits
 - Search for “Researching ADs Using the FAA DRS Website”
- Or...
 - <https://www.youtube.com/watch?v=QuQdQUHzY-0>
- Create an AD list for your plane
 - Airframe
 - Engine
 - Accessories

The screenshot displays the SocialFlight website interface. At the top, a navigation bar includes icons for SOCIALFLIGHT, MAP, VIDEOS, HANGAR, REWARDS, CHALLENGE, and FAA CREDITS (circled in yellow). Below the navigation bar is a banner for "Miss a SocialFlight Live Show? Watch them HERE" with an "ADD EVENT" button. A search bar allows users to enter an airport ID or city/state, filter by "Next 60 days", "All Events", and a 200-mile radius, with a "SEARCH" button. The main content area features a "Home" button and several course categories: "FAA WINGS/AMT Courses", "FAA A&P/ IA Renewal Courses", "Progress & Credits", and "Return to Socialflight". A large image of a yellow biplane is shown. Below this, the "FAA WINGS/AMT Courses" section is highlighted with a yellow circle and contains three course cards: "Four (4) AD Lists" (with a "Missing" red stamp), "uAvionix AV-30 User Training", and "uAvionix AV-30 Installer Training".



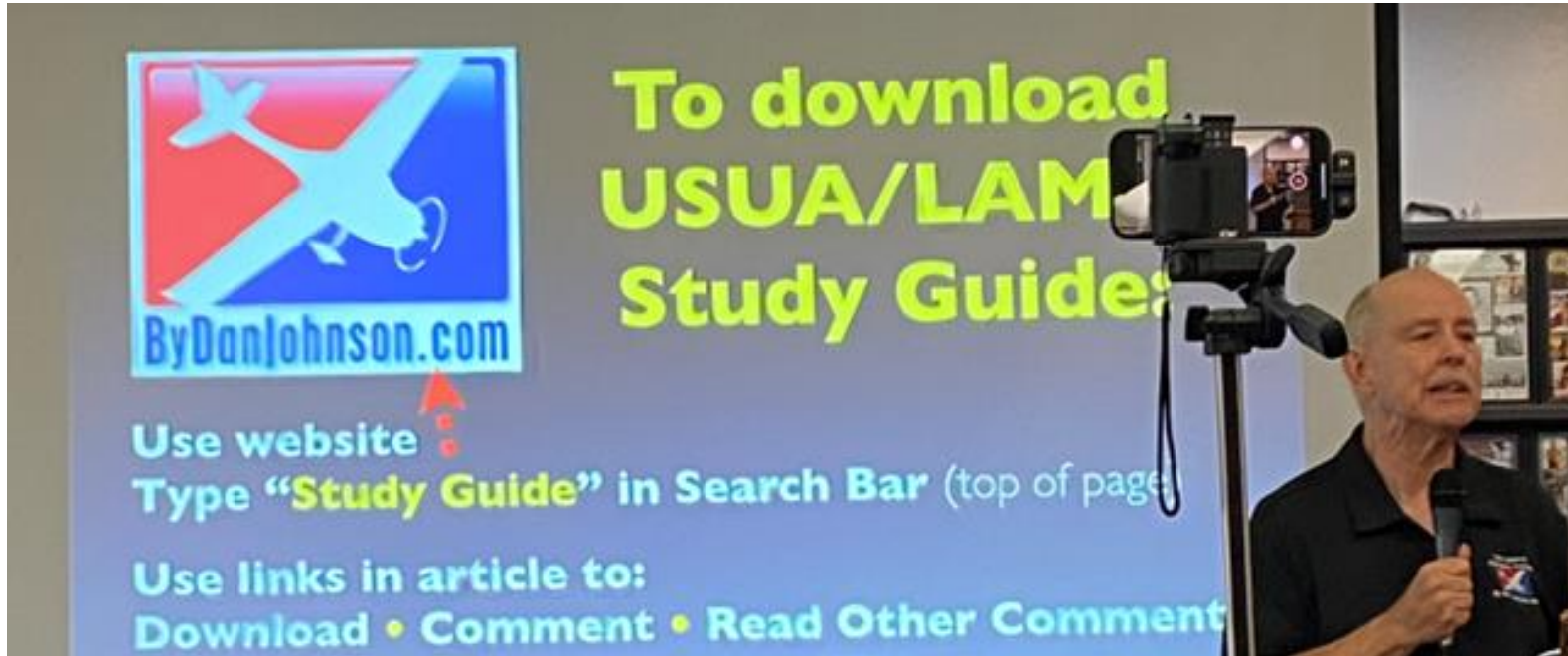
Homework-4a: MOSAIC

- Read the Notice of Proposed Rule Making (NPRM) for “*The Modernization of Special Airworthiness Certification*” (MOSAIC)
 - <https://www.federalregister.gov/documents/2023/07/24/2023-14425/modernization-of-special-airworthiness-certification>
- Follow industry opinions:
 - https://www.eaa.org/eea/news-and-publications/eea-news-and-aviation-news/news/mosaic-extension?utm_source=ehotline_230824&utm_medium=email&utm_campaign=advocacy_2023&mkt_tok
 - <https://rainbowaviation.com/?p=8566>
 - https://www.faa.gov/SPANS/event_details.aspx?eid=123908
 - <https://www.eaa.org/eea/news-and-publications/eea-news-and-aviation-news/news/mosaic-takes-significant-step-forward>
 - <https://www.aopa.org/news-and-media/all-news/2023/july/25/mosaic-proposed-rule-published>
- Exercise your rights and send your comments to the FAA



Homework-4b: MOSAIC

- Handy Study Guide to MOSAIC



- Exercise your rights and send your comments to the FAA



Homework-5-: SLAP

After every flight, **SLAP** yourself and create actions for the next flight:

S: How were my **Skills** today?

L: What did I **Learn** today?

A: How was my **ADM** today?

P: How was my **Planning** today?



Next Month...

- New “Fiscal Year” ...so don’t really know yet...
- Probably Aeromedicine—something like “Pills and the Pilot”



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FLYING CLUB CONNECTOR NEWSLETTER

Your source for the latest news on flying clubs all over the country. AOPA's research has shown us that flying club leaders are hungry to learn more about the practical experiences of other clubs. So, we have created this monthly e-newsletter.

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NEWS FROM HQ	QUESTION OF THE MONTH	CLUB SPOTLIGHT
AIRCRAFT SPOTLIGHT	SAFETY	EVENT SPOTLIGHT

CLUB CONNECTOR ARTICLES

[NARROW RESULTS](#) ▾



Thank you for attending

- You are vital members of our GA safety community.

