

The National FAA Safety Team Presents

Understanding Airworthiness Directives (ADs)

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



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Welcome

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



Introduction

- Missed ADs cause accidents
- Who can perform ADs
- Who is responsible



Objective

At the conclusion of this program, attendees will have a better understanding of the principles of ADs and will know who is responsible for compliance, performance, and record keeping.



Airworthiness Directives are Serious Documents



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Airworthiness Directives defined:

Airworthiness Directives are legally enforceable rules that apply to the following products:

- Aircraft
- Aircraft engines
- Propellers
- Appliances



When are ADs issued?

- **FAA issues an airworthiness directive when we find that:**
 - (a) An unsafe condition exists in the product
 - (b) The condition is likely to exist or develop in other products of the same type design.

Yikes!



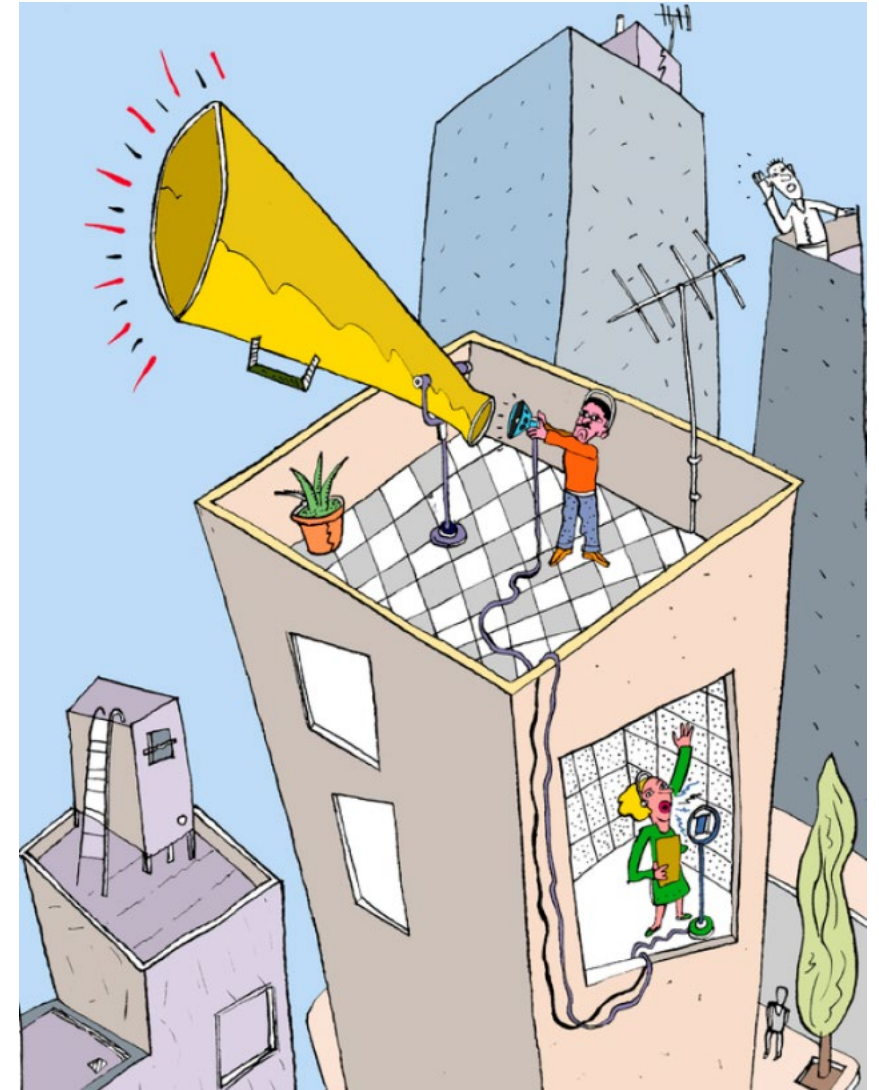
What is the purpose of ADs?

ADs are used to notify aircraft owners and other interested persons of unsafe conditions and to specify the conditions under which the product may continue to be operated.

Mandatory

Dates

Hours



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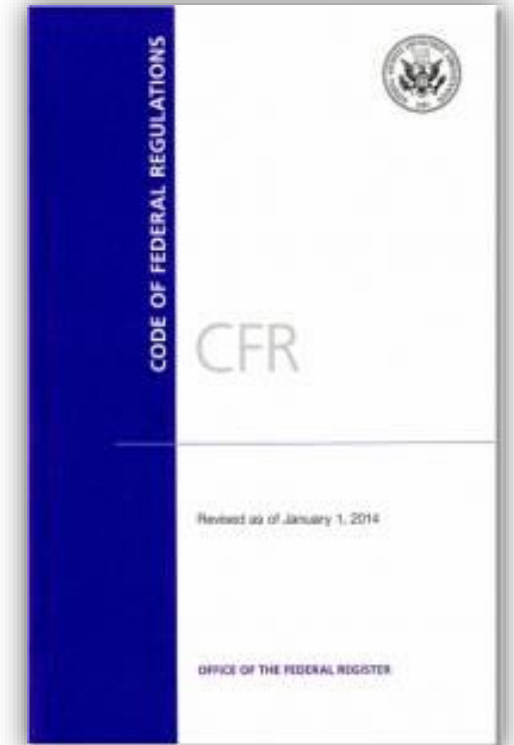
Required Actions

- **Airworthiness Directives specify**
 - inspections
 - conditions and limitations
 - actions
- **To resolve an unsafe condition**



Code of Federal Regulations

- **Airworthiness Directives are Regulations**
- **FAA publishes Airworthiness Directives in the Federal Register**



Product Changes

- **Airworthiness Directive Application**
- **They apply even if:**
 - product has been changed by
 - Modifying,
 - Altering
 - Repairing



AMOC

What if a change in a product affects my ability to accomplish the actions required in an AD?

Request an alternative method of compliance (AMOC)



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FAA-Approved Alternative Methods of Compliance

Contact your friendly FSDO maintenance inspector

ADs identify the responsible engineering office

The contact information is at the bottom of all ADs



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Ferry Flight

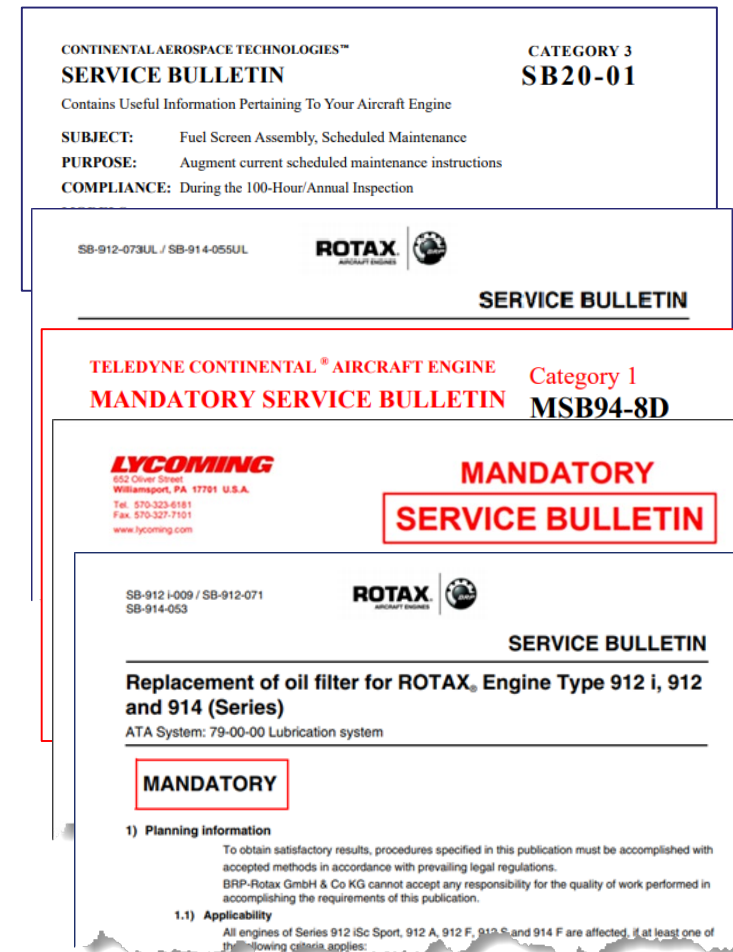
- **Flight Standards District Offices' (FSDO) issue special flight permits (ferry permits)**
 - ADs should be complied with first
 - Each AD has its own limitations
 - Special requirements
 - The bottom line is safety



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ADs conflicting with the service document

- **ADs may incorporate manufacturer's service documents**
 - The service document becomes part of the AD
 - The service document may be modified by the AD
 - In case of conflict



Perform the AD



Properly Certificated Maintainers

Pilots, only if the AD specifically allows it



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Responsible for AD Compliance

- **14 CFR Part 91.403**
 - Owner or Operator
 - Not the Maintainer



AD Records 14 CFR Part 91.417

- **Operators shall keep the current status of:**

- Applicable airworthiness directives (AD)
- Safety Directives
- The method of compliance
- The AD or Safety Directive number
- Revision date

- **If recurring**

- time and date when action is required

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD								
Aircraft: <u>PA-22-135</u>			<u>N2631A</u>			<u>S/N 22-903</u>		
Engine: <u>Lycoming O-290-D2</u>						<u>S/N 4563-21</u>		
Propeller: <u>Sensenich M 76AM2</u>						<u>S/N 6662</u>		
AD & AMEND NUM.	REV. NUM. & DATE	SUBJECT	DATE/ HOURS AT COMP.	METHOD OF COMP.	ONE TIME	RECUR- RING	COMP. DUE DATE/ HRS	AUTHORIZED SIGNATURE & NUMBER
76-07-12 39-3024	R-1 8-30-77	Bendix ignition switch	11-11-94 1850TT	Operational check and inspection	X			Phil Lomax A&P 000000000
93-18-03 39-8688	Original 10-29-93	One-piece venturi	3-17-95 1850OTT	Installed one-piece venturi Carb S/N BR-549		X	1900TT	Phil Lomax A&P 000000000



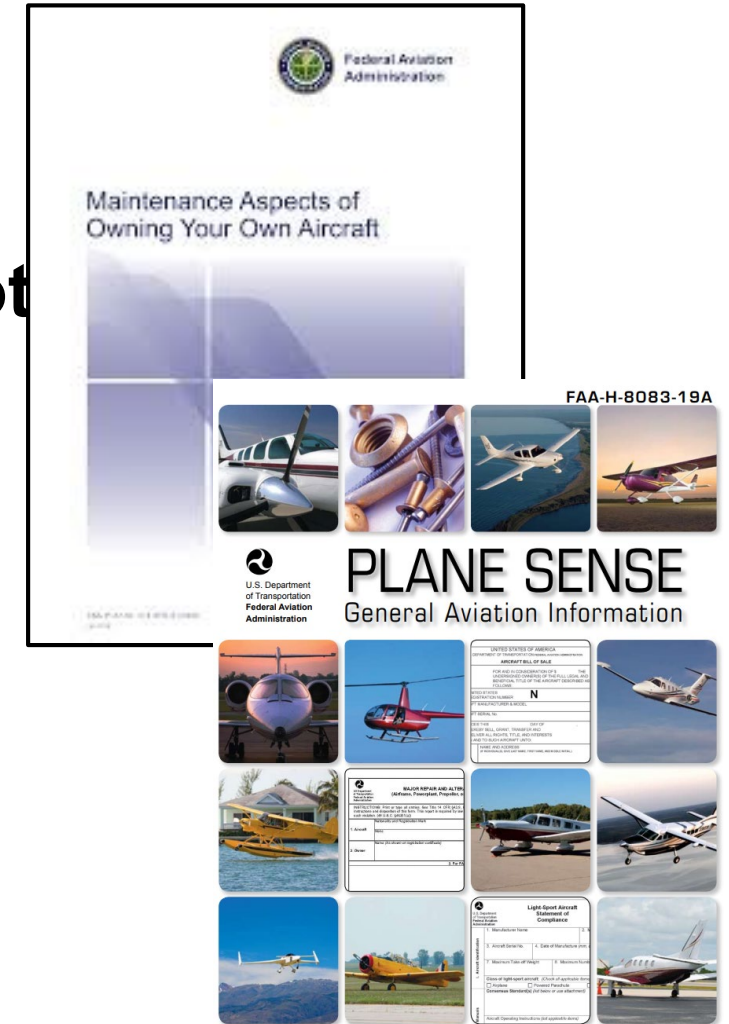
When must ADs be complied with

- By the due date or time specified in the AD
- ADs may be due between inspections



The Regulation States.....

- 14 CFR (FAR) Part 43 appendix B does not list AD note compliance as Preventative Maintenance
- If the AD says the pilot may perform the work, then they can
- Otherwise... they can't



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AD Records

- **Obvious things**

Complied with (C/W)

Previously Complied With (PCW)

Not Applicable (N/A)

In Accordance with (IAW)

Overhaul (O/H)

Model Number (M/N)

Serial Number (S/N)

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD						
Make <u>Piper</u>		Model <u>PA28-161</u>		S/N <u>28-7410669</u>		
AD Number	Subject	Date and Hours of Compliance	Method of Compliance	One time Recurring	Next Comp. Due.	Authorized Signature
62-19-03 08-28-62	Prop Bolt failure	1044.8 12-01-77	N/A by S/N	X		George B. Jones AP 272182 IA
64-06-06 04-06-64	Control Wheel failure	1044.8 12-01-77	N/A by S/N	X		George B. Jones AP 272182 IA
67-20-04 09-27-67	Main landing gear torque link failure	1044.8 12-01-77	N/A by Torque links not drilled for lube fittings	X		George B. Jones AP 272182 IA
67-26-02 05-22-68	Various Modifications	1044.8 12-01-77	N/A by S/N	X		George B. Jones AP 272182 IA
77-23-03 11-14-77	Control Rod Binding	1044.8 12-01-77	C/W by installing new style rod end	X		George B. Jones AP 272182 IA
79-02-05 01-29-79	Fuel Flow Interruption	1308.7 12-30-79	N/A by S/N	X		George B. Jones AP 272182 IA
79-13-03 06-08-79	Prevent Potential Fire Hazard	1352.2 01-05-80	N/A by S/N	X		George B. Jones AP 272182 IA
79-22-02 10-26-79	Prevent Possible Fuel Leakage and Fire Haz.	1352.6 01-05-80	N/A by S/N	X		George B. Jones AP 272182 IA
80-14-03 07-01-80	Disruption of Radio Communication	1422.3 01-05-81	N/A by S/N	X		George B. Jones AP 272182 IA
81-23-05 03-08-82	Prevent In-Flight Fire	1615.4 05-25-82	C/W by inspection and by installing Piper kit P/N 764-303V	X		George B. Jones AP 272182 IA
95-26-13 02-05-96	Oil Cooler Hose Failure	2589.2 03-28-96	C/W by installing new hoses	X	3589.2 03-28-04	George B. Jones AP 272182 IA
96-10-03 06-14-96	To Prevent Flap Handle Bolt Failure	2596.9 07-15-96	C/W By Inspection and by installing new bolt & bushing	X		George B. Jones AP 272182 IA



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AD Records

- If an AD is N/A
- i.e., AD 78-16-05R1 is not applicable by model number. Model number XX, serial number was found installed

4-20-95	A/C WASHED & CLEANED	
TT 4024-1	LUBRICATED IN ACCORDANCE WITH	
TAC 4024-1	2060 MANUAL 100 HR INSPECTION	
	IN ACCORDANCE WITH CESSNA 206 MANUAL	
	INSPECTED & LUBRICATED CONTROL SURFACES	
	HINGES & LUBE CONTROLS	
	SEATS REMOVED & REPLACED	
	AREA UNDER FLOOR SURFACE CLEANED	
	SEAT RAILS REPLACED	
	WHEEL BEARINGS LUBRICATED	
	HYDRAULIC FLUID SERVICED	
	TIRES CHECKED & INFLATED	

Inspection and was determined to be in accordance with a N ANNUAL inspection. Total time to complete 4024-1 and A.D. Summary checked till 4-20-95
Signed: [Signature] [Signature]



Would you like to get free AD notes?

Regulatory and Guidance Library

The FAA's Regulatory & Guidance Library (RGL) contains many aviation regulatory, certification, and safety information documents. Select a database from the list to the right.

Notifications:

ADs and SAIBs: Click [here](#) to create or modify your email subscription for ADs and SAIBs. We currently offer this subscription only for type-certificated products.

free e-mail service

Sign up at <http://rgl.faa.gov>

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Contact:

If you have a technical question or comment about a document in the RGL, please contact the responsible person or office listed in the document.

If you have a question or comment about the status of documents in the RGL, or you can't find contact information for your technical question about a specific document, please contact us at rgl@faa.gov.

Tips:

For a short and simple path to RGL, type "rgl.faa.gov" into your address bar.

If you are an FAA user logged in to Lotus Notes, you can click [here](#) to access RGL in your Notes client.

RGL v17.1 - July 2021

Orders/Notices

[Parts Manufacturer Approvals](#)
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[Special Conditions](#)
[Supplemental Type Certificates](#)
[Technical Standard Orders and Index](#)
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Additional Links

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Safety Management Systems (SMS) Coming to General Aviation



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



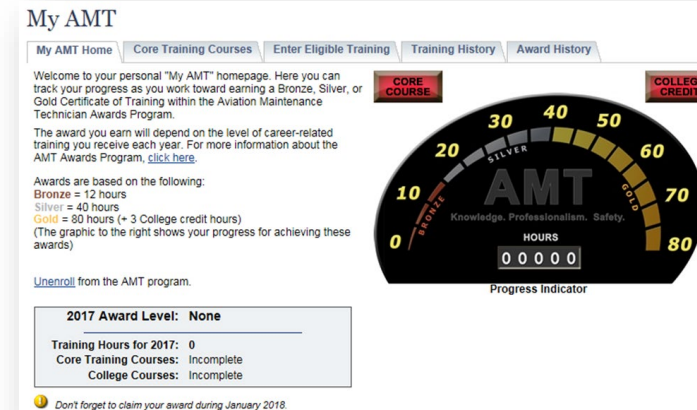
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Questions?



Training and Peace of Mind

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



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Thank you for attending

You are vital members of our GA safety community



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