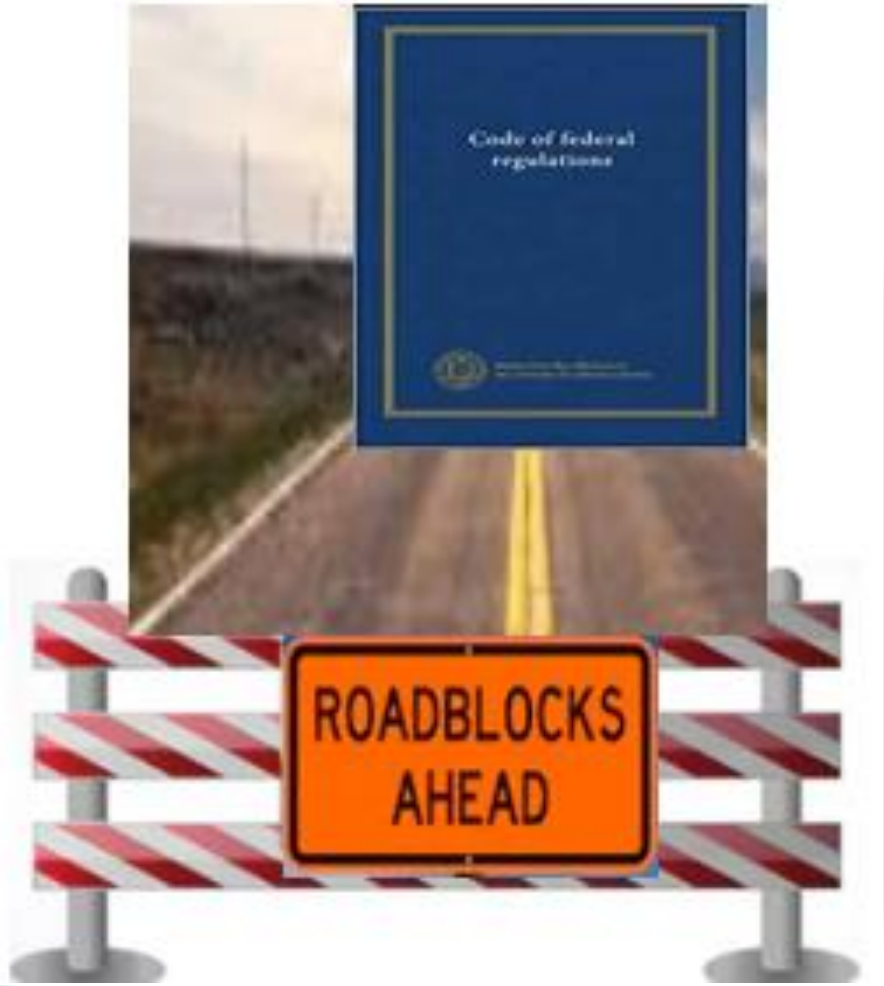
The National FAA Safety Team Presents

Federal Aviation Administration

Topic of the Month - June

Regulatory Roadblock Reduction



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By: <Presenter>

Date: < >

Produced by:
The National FAA Safety Team (FAASTeam)

Welcome

- Exits
- Restrooms
- Emergency Evacuation
- Breaks
- Set phones & pagers to silent or off
- Sponsor Acknowledgment
- Other information

Overview

- **Understanding Regulatory Roadblocks**
- **Changes to certification of Part 23 aircraft**
- **Technology to address LOC accidents**

*** General Aviation Joint Steering Committee**

Approval of non-required safety equipment

U.S. Department of Transportation
Federal Aviation Administration

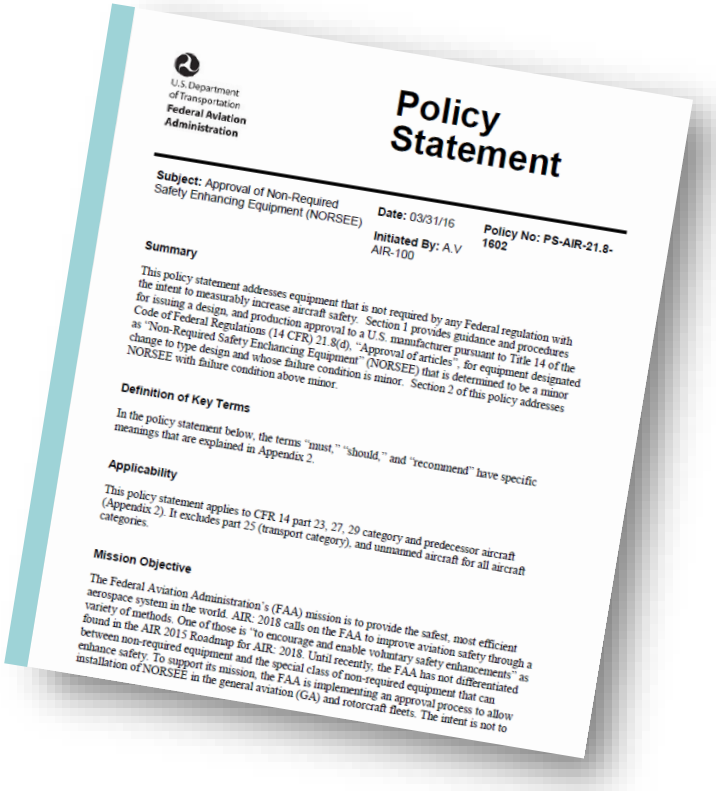
Policy Statement

Subject: Approval of Non-Required Safety Enhancing Equipment (NORSEE)

Date: 03/31/16

Initiated By: A.V
AIR-100

Policy No: PS-AIR-21.8-1602


U.S. Department of Transportation
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Policy Statement

Subject: Approval of Non-Required Safety Enhancing Equipment (NORSEE)

Date: 03/31/16

Initiated By: A.V AIR-100

Policy No: PS-AIR-21.8-1602

Summary

This policy statement addresses equipment that is not required by any Federal regulation with the intent to measurably increase aircraft safety. Section 1 provides guidance and procedures for issuing a design, and production approval to a U.S. manufacturer pursuant to Title 14 of the Code of Federal Regulations (14 CFR) 21.8(d), "Approval of articles", for equipment designated as "Non-Required Safety Enchancing Equipment" (NORSEE) that is determined to be a minor change to type design and whose failure condition is minor. Section 2 of this policy addresses NORSEE with failure condition above minor.

Definition of Key Terms

In the policy statement below, the terms "must," "should," and "recommend" have specific meanings that are explained in Appendix 2.

Applicability

This policy statement applies to CFR 14 part 23, 27, 29 category and predecessor aircraft (Appendix 2). It excludes part 25 (transport category), and unmanned aircraft for all aircraft categories.

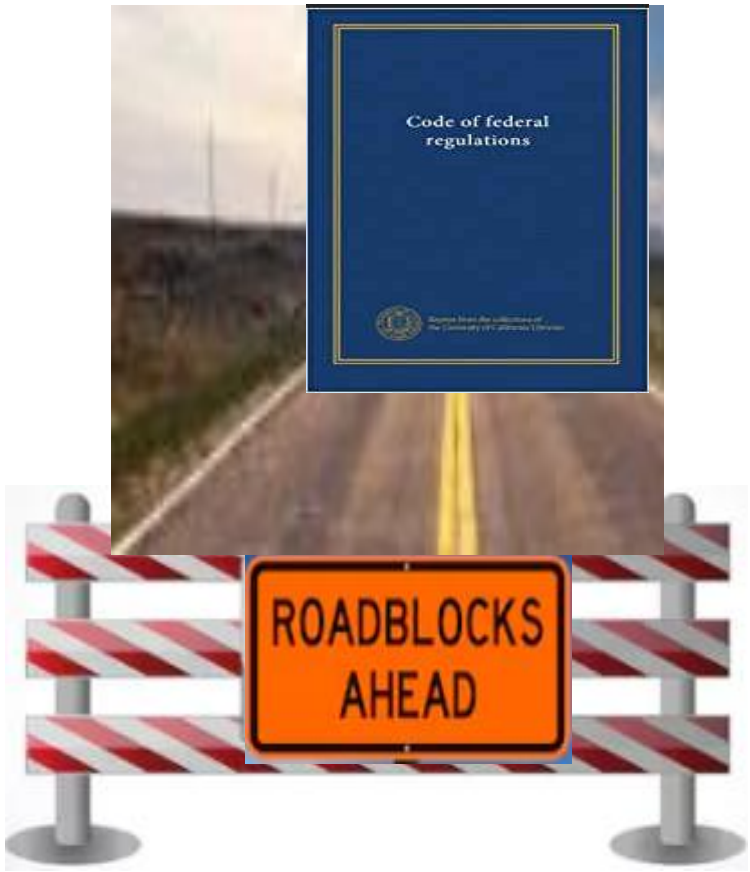
Mission Objective

The Federal Aviation Administration's (FAA) mission is to provide the safest, most efficient aerospace system in the world. AIR: 2018 calls on the FAA to improve aviation safety through a variety of methods. One of those is "to encourage and enable voluntary safety enhancements" as found in the AIR 2015 Roadmap for AIR: 2018. Until recently, the FAA has not differentiated between non-required equipment and the special class of non-required equipment that can enhance safety. To support its mission, the FAA is implementing an approval process to allow installation of NORSEE in the general aviation (GA) and rotorcraft fleets. The intent is not to

Reducing Regulatory Roadblocks

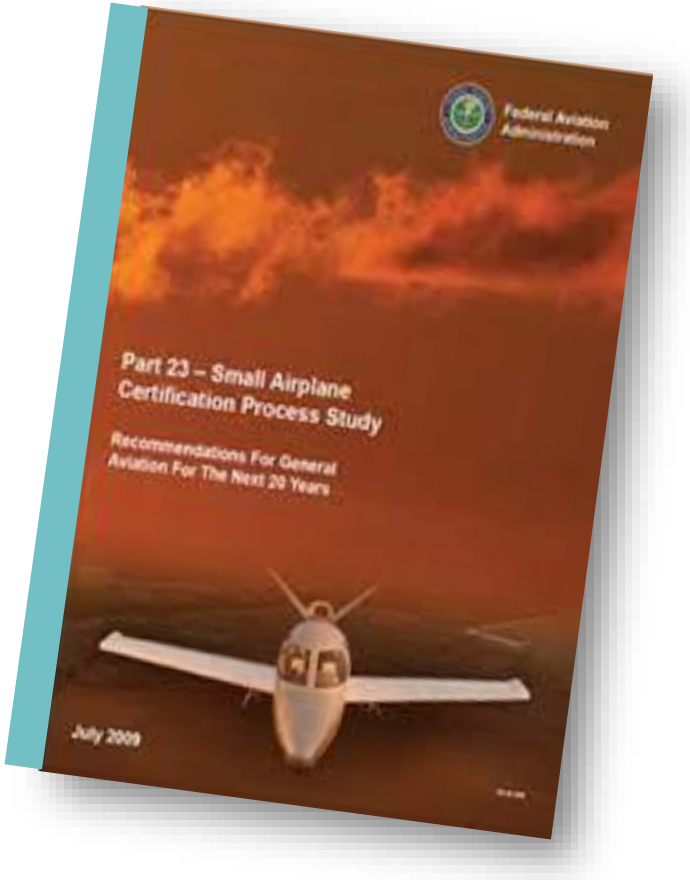
The FAA has accepted ASTM International standards as a means of certification for Part 23 aircraft.

This is aimed to streamline certification standards to reduce the regulatory burden on the industry and reduce the cost of aircraft certification.



Changes to Certification of Part 23 Aircraft

The final rule overhauling airworthiness standards for general aviation airplanes, published in December of 2016, is now in effect.



Changes to Certification of Part 23 Aircraft

ASTM INTERNATIONAL
Helping our world work better

ASTM Consensus Standards F3264 - 17

Standard Specification for Normal Category Aeroplanes Certification

The introduction of new aircraft might have just become a lot easier. The FAA has accepted ASTM International standards as a means of certification for Part 23 aircraft.

Aviation Technology

- **Technology that addresses LOC in GA aircraft could either be installed or portable devices such as:**

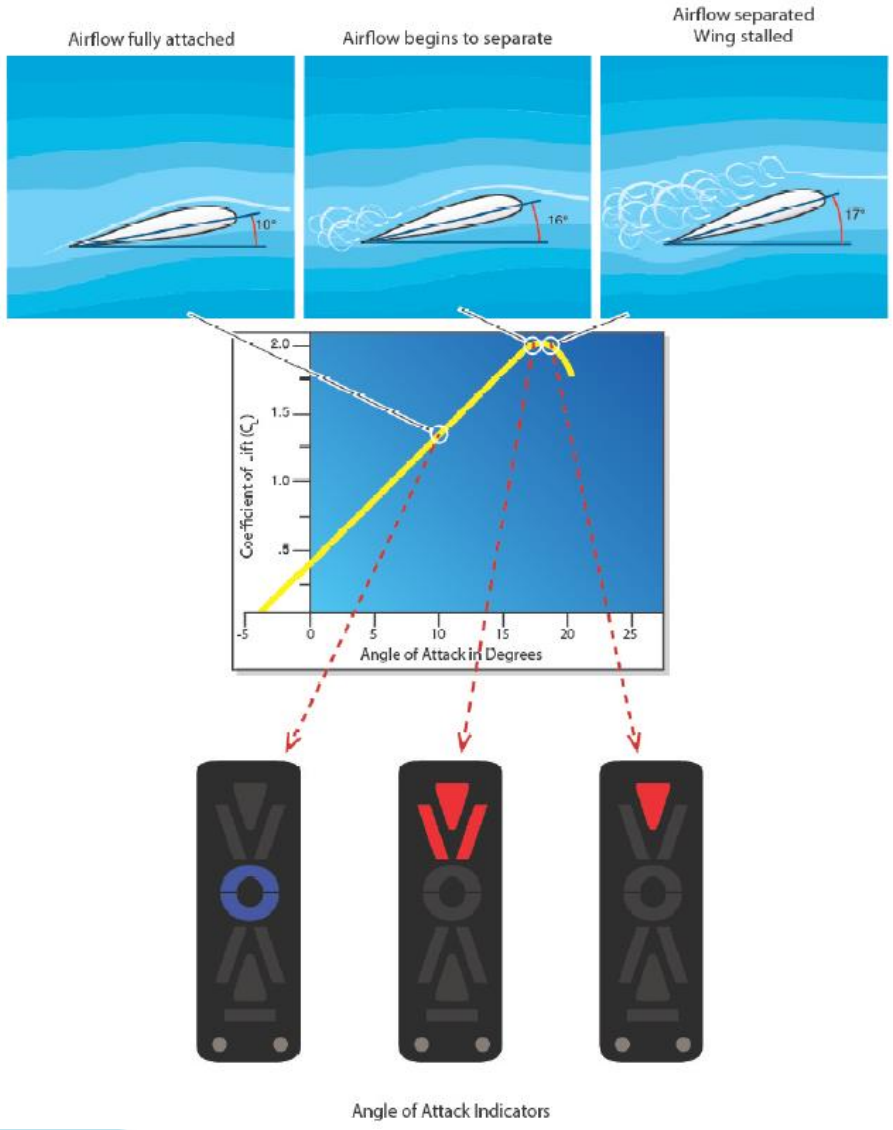
- **Auto Pilot**
- **GPS Navigation**
- **AOA Indicator**

GAJSC Report Finds IMC Accidents Frequently Started During Approach.

The GAJSC believes that providing pilots with GPS moving maps, real time weather, and terrain awareness has made a significant reduction in pilot workload during non-precision approaches.

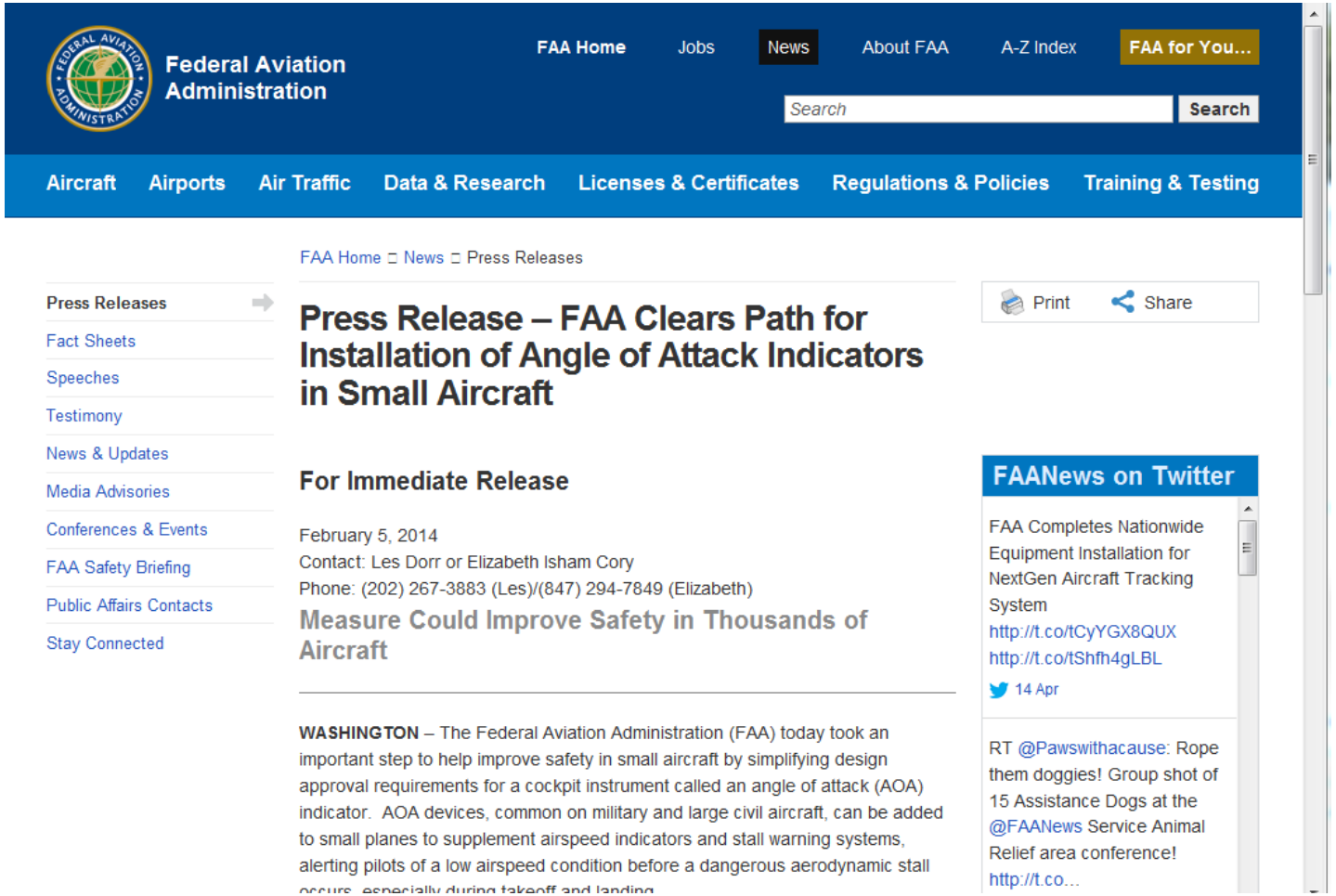
Risk Mitigation

- **Angle of Attack Indicators – AOA**
- **The purpose of an AOA indicator is to give the pilot better situational awareness pertaining to the aerodynamic health of the airfoil. This can also be referred as stall margin awareness. More simply explained, it is the margin that exists between the current AOA that the airfoil will stall**
- **(critical AOA).**



Angle of Attack Indicators

Streamlined Certification Process



Federal Aviation Administration

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Press Release – FAA Clears Path for Installation of Angle of Attack Indicators in Small Aircraft

For Immediate Release

February 5, 2014
Contact: Les Dorr or Elizabeth Isham Cory
Phone: (202) 267-3883 (Les)/(847) 294-7849 (Elizabeth)

Measure Could Improve Safety in Thousands of Aircraft

WASHINGTON – The Federal Aviation Administration (FAA) today took an important step to help improve safety in small aircraft by simplifying design approval requirements for a cockpit instrument called an angle of attack (AOA) indicator. AOA devices, common on military and large civil aircraft, can be added to small planes to supplement airspeed indicators and stall warning systems, alerting pilots of a low airspeed condition before a dangerous aerodynamic stall occurs, especially during takeoff and landing.

FAANews on Twitter

FAA Completes Nationwide Equipment Installation for NextGen Aircraft Tracking System
http://t.co/tCyYGX8QUX
http://t.co/tShfh4gLBL
14 Apr

RT @Pawswithacause: Rope them doggies! Group shot of 15 Assistance Dogs at the @FAANews Service Animal Relief area conference!
http://t.co...

http://Bit.ly/3NGriYD

Risk Mitigation

- **Autopilot**
- **An AOPA Air Safety Institute report points out that an installed autopilot could reduce IMC and Night flight accidents by 50%.**

Risk Mitigation

- **Autopilot**
- **Is not required equipment except in a few high end part 23 aircraft.**

Summary – Removing Regulatory Roadblocks

- With ASTM International consensus standards, certification of part 23 aircraft could become easier.
- GA is going through a technical revolution and is accelerating today.
- The FAA is working on ways to simplify certification & installation

One more example

- Garmin Emergency Autoland (EAL) system
  - Piper M600, TBM 940, Cirrus Vision Jet
  - When activated - squawks 7700 & broadcast on pilot selected and 121.5 Mhz.
  - Navigates to suitable emergency airport and lands
- Listen for broadcasts and remain clear of emergency aircraft

Photo courtesy of Cirrus Aircraft

Questions?

Proficiency and Peace of Mind

- **Fly regularly with your CFI**
- **Perfect Practice**
- **Document in *WINGS***

http://www.mywingsinitiative.org/

The Paul and Fran Burger 2021 $10,000 *WINGS* Sweepstakes

The ***WINGS*** Sweepstakes mission is to reduce the nation's accident and incident rate by increasing pilot participation in the *WINGS* FAASTeam Pilot Proficiency Program. The *WINGS* program has courses based on real world accident and incident causes so flight instructors, pilots and student pilots get training that can truly make a difference.

Studies indicate that pilots who complete *WINGS* phases are safer aviators. Please join us in saving lives.

Captain Sully endorses the *WINGS* Pilot Proficiency Program
View the video
learn about the program and its many benefits.

The 2020 Sweepstakes awards 10 cash prizes! Prize levels include:

Four (4) $1,500
Four (4) $750
Two (2) $500

WINGS
Industry Network

Safety Management Systems (SMS) Coming to General Aviation

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

Thank you for attending

- **You are vital members of our GA safety community**

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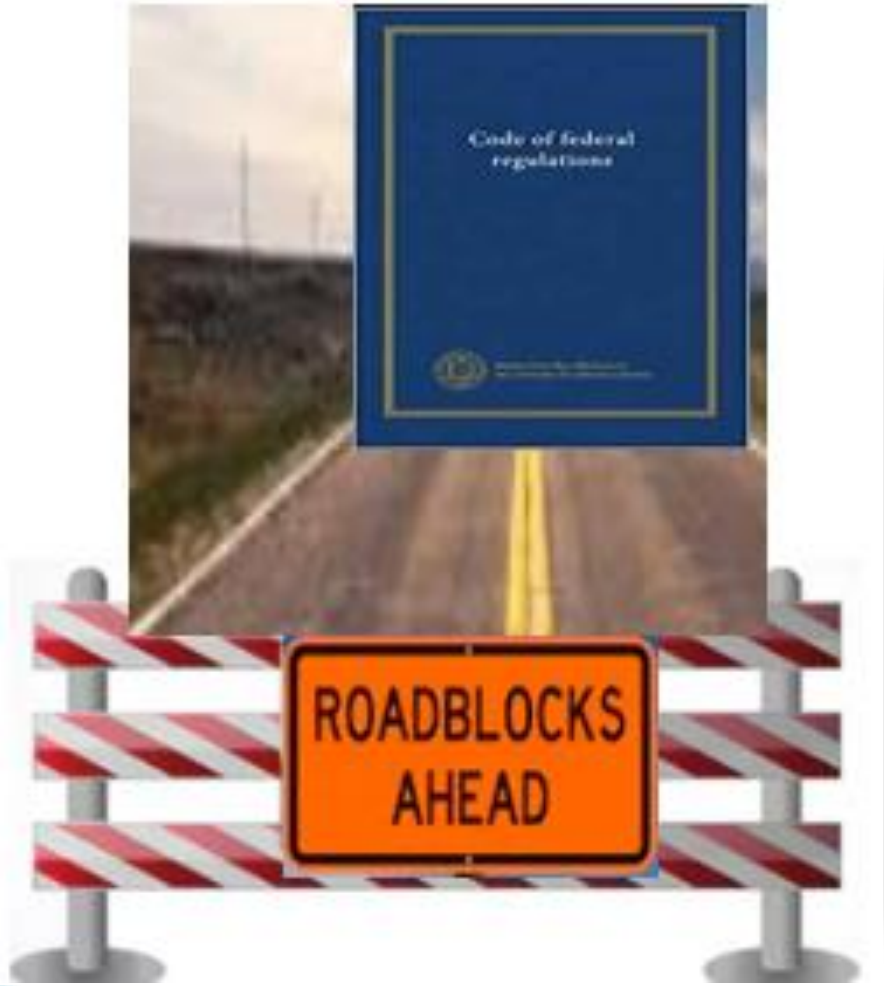

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