FAR Part 91 Review

Session Time: Four, 50-minute sessions

DESIRED RESULTS

ESSENTIAL UNDERSTANDINGS

The regulatory environment consists of both regulatory and advisory publications, including the Federal Aviation Regulations (FARs), Aeronautical Information Manual (AIM), Advisory Circulars (ACs), Airworthiness Directives (ADs), Notices to Airmen (NOTAMs), and NTSB Part 830.

The Federal Aviation Administration (FAA) and National Transportation Safety Board (NTSB) produce documents that pilots must familiarize themselves with.

ESSENTIAL QUESTIONS

1. Where do pilots find the rules and regulations that govern aviation in the United States?

LEARNING GOALS

Students Will Know

- The purpose of the FAA's Federal Aviation Regulations (FAR) Part 91.
- The types of information provided by FAR Part 91.

Students Will Be Able To

- *Recall* information contained in FAR Part 91 that is applicable to the FAA Private Pilot Knowledge Test. [DOK-L1]
- *Create* a study guide for classmates that allows them to prepare to answer FAR Part 91 questions. [DOK-L4]
- *Construct* a set of questions related to FAR Part 91 in the style of an FAA Private Pilot Knowledge Test. [DOK-L3]
- *Assess* scenarios related to FAR Part 91. [DOK-L3]

ASSESSMENT EVIDENCE

Warm-up
As a class, students will identify topics covered by FAR Part 91.

Formative Assessment
As a class, students will review four sample FAA-style exam questions on the content of FAR Part 91, with further discussion on where the content is located in the FARs.

Summative Assessment

Working individually, students will answer FAA-style practice questions about FAR Part 91.

LESSON PREPARATION

MATERIALS/RESOURCES

- FAR Part 91 Review Presentation
- FAR Part 91 Review Student Activity 1
- FAR Part 91 Review Student Activity 2
- FAR Part 91 Review Student Activity 3
- FAR Part 91 Review Teacher Notes 1
- FAR Part 91 Review Teacher Notes 2
- FAR Part 91 Review Teacher Notes 3
- **Access to a copy of FAR Part 91, hardcopy or electronic**
    - **Electronic copy can be accessed here:** https://www.ecfr.gov/cgi-bin/text-idx?SID=0277756ef77e4f1e10f77c8a23410ef1&mc=true&tpl=/ecfrbrowse/Title14/14cfr91_main_02.tpl

LESSON SUMMARY

Lesson 1: FAR Part 91 Review

The lesson begins with a warm-up that challenges students to identify which of several subject areas belong in FAR Part 91 and which do not. This is followed by a discussion of Part 91 that covers general topic areas relevant to private pilots. The first session ends with a formative assessment about Part 91.

During the next part of the lesson, students work in groups to review an assigned portion of Part 91, and then write example test questions covering that portion. The combined result will be a test bank of questions the students can use as a study guide.

In the third session, students work in groups to analyze aviation-related scenarios for potential violations of Part 91.

Finally, students work together to study the Part 91 questions they have developed. Students then complete a summative assessment consisting of a practice FAA-style test; teachers have the option of creating the test from the questions that students developed.

BACKGROUND

U.S. federal administrative law is written into 50 Titles under the Code of Federal Regulations (CFRs). Title 14 is Aeronautics and Space, which is where the Federal Aviation Regulations (FARs) are located. Each title is broken into various chapters and parts. This lesson discusses one of the more relevant parts for general aviation pilots: 14 CFR 91, or simply “Part 91.”

Part 91 is the set of general operating and flight rules for pilots. It might be considered equivalent to the basic rules governing driving cars and other road vehicles: speed limits, vehicle inspections, right-of-way, emergency procedures, etc. Similar to these driving rules, Part 91 covers the basic "rules of the road" for aviators.

While the volume of information may seem intimidating at times, all pilots are required to be aware of and adhere to the operating rules in Part 91. Some paragraphs are referenced so frequently that many pilots have them memorized, while the same pilots may have only a general idea of other paragraphs. In any case, pilots should be comfortable with accessing and reading Part 91, and they should know how to find the rules within it should they need to look one up.

As with Part 61, Part 91 is available in hardcopy books printed by private companies. It can also be found online at www.eCFR.gov.

MISCONCEPTIONS

Some students may think the FARs exist in isolation; however, the FARs are actually just one set of a larger Code of Federal Regulations (CFRs), which is essentially a rulebook of all administrative functions for the country. These federal regulations are not "laws" in the traditional sense; they are not normally created directly as legislation in Congress and then signed by the President. Rather, Congress has empowered administrative agencies to make rules and regulations governing their designated areas. In this case, the agency is the Federal Aviation Administration. The FAA is responsible for approximately 200 "Parts" in Title 14 of the federal regulations.

Some students may think the rules for flying are simply common sense. The truth is that the regulations are very specific and address specific situations and issues. Pilots are expected to know and follow the FARs that pertain to the type of flying they do. Flight operations can be conducted more safely and efficiently when all pilots properly follow the FARs.

Finally, some students may think that all of the rules of aviation apply equally and all of the time. In fact, the application of a rule may vary based on the conditions under which an airplane is being operated or the date when the airplane was manufactured. Pilots must read and understand the rules and regulations so they can understand which ones apply to them.

DIFFERENTIATION

To support student comprehension and understanding during the **EXPLAIN** section of the lesson plan, have students set up an outline to take notes. Headings should include: Subpart A, Subpart B, Subpart C, Subpart D, and Subpart E.

To promote student collaboration during the **EXTEND** section of the lesson plan, establish roles for each member of the group. This can help students stay on task and help them feel that they are all equally contributing to the group's effort.

LEARNING PLAN

ENGAGE

Teacher Material: FAR Part 91 Review Presentation

Session 1

Slides 1-3: Introduce the topic and learning objectives of the lesson.

Slides 4-5: Conduct the **Warm-Up**.

Warm-Up

Show the class Slide 4, which consists of 12 topics relevant to aviation. As a group, students should use the knowledge they gained about the FARs in previous lessons to identify the topic blocks on the slide that come from Part 91. The objective is for students to begin to see the basic subject areas and categories of material in Part 91.

Correct responses are noted in bold below (by rows) and highlighted on Slide 5.

Defines "flight time" as the time from the start of taxi to shutdown (Part 1)
Defines "reckless operation" (Part 91.13)
Explains changing a pilot's name on a certificate (Part 61)
Lists required equipment for day, VFR operations (Part 91.205)

Defines pilotage as navigation by visual reference to landmarks (Part 1)
Describes who is responsible for maintenance record entries (Part 91.405(b))

Lists pilot recency requirements (Part 61)
Requires a flight manual onboard during operations (Part 91.9(b))

Explains vision standards for medical certification (Part 67)
Lists maintenance that non-mechanics can perform (Part 43)
Explains when simulator time can be logged (Part 61)
Requires annual aircraft maintenance inspections (Part 91.409)

For deeper understanding, have the students discuss why they think Part 91 covers that topic, or why another FAR Part does not cover it.

Responses may vary, but essentially students should demonstrate an understanding that Part 91 generally covers the subjects of operating rules and restrictions.

The Warm-Up discussion should focus on those topics covered by Part 91 in order to transition to the rest of the lesson, which explores Part 91 in greater detail.

EXPLORE

Teacher Material: FAR Part 91 Review Presentation

Slide 6: This lesson covers Part 91, which is one part of Title 14 of the Code of Federal Regulations (CFR). Like 14 CFR 61, which students explored in the previous lesson, Part 91 is especially important to pilots. It includes the following key topics:

- flight rules
- equipment requirements
- special flight operations
- some maintenance and inspection requirements.

Later in this lesson students will break into groups and write test questions that assess their knowledge of Part 91, as they might expect to see on the FAA Private Pilot Knowledge Test, much like they did for Part 61. Their questions will be incorporated into the class study guide. At the teacher's discretion, students' questions can also be used to create a practice test.

EXPLAIN

Teacher Material: FAR Part 91 Review Presentation
Student Material: Print or electronic copy of FAR Part 91

Slide 7: There are many regulations in Part 91, but not all of them apply to private pilots. For example, there are subparts on large and turbine-powered aircraft, foreign aircraft operations, and fractional ownership operations. Those subjects are not assessed by the FAA on the Private Pilot Knowledge Test, so they are not covered in this lesson.

Part 91 is divided into 14 subparts. The ones of most importance to the Private Pilot Knowledge Test are the first five:

- Subpart A – General
- Subpart B – Flight Rules
- Subpart C – Equipment, Instrument, and Certificate Requirements
- Subpart D – Special Flight Operations
- Subpart E – Maintenance, Preventative Maintenance, and Alterations

These subparts contain too many regulations to cover every one. Instead, this lesson will highlight a few regulations from each subpart that help to reveal the subpart's relevance.

Slide 8: Subpart A covers the general operating rules within the U.S. National Airspace System. These include the responsibilities of a pilot in command and topics such as aircraft airworthiness, drugs and alcohol, and the use of portable electronic devices during flight.

Slide 9: While some of the rules in Subpart A are very specific, a few are written more broadly. For example, FAR 91.13 is the "reckless driving" regulation for aircraft operations both in flight (a) and on the ground (b):

91.13 Careless or reckless operation.
(a) Aircraft operations for the purpose of air navigation. No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.
(b) Aircraft operations other than for the purpose of air navigation. No person may operate an aircraft, other than for the purpose of air navigation, on any part of the surface of an airport used by aircraft for air commerce (including areas used by those aircraft for receiving or discharging persons or cargo), in a careless or reckless manner so as to endanger the life or property of another.

It is impossible for the FAA to write a rule encompassing every possible scenario, so this regulation essentially holds pilots responsible for safe operations, even if there isn't a specific rule against what they are doing. If what the pilot is doing could be considered "careless or reckless," they are in violation of 91.13. Of note, neither Part 91 nor any other part of the FARs defines "careless or reckless," other than to say it describes behavior that "endanger[s] the life or property of another."

Questions

What do you think "careless or reckless" ground or flight operations might be?

Responses will vary. There is not a single correct answer. The objective is for students to consider that the rules don't cover every conceivable action, and just because the FARs don't address a particular behavior doesn't mean the behavior is safe or legal. If students have difficulty and some students have drivers' licenses, have them consider what behaviors fall under "reckless driving." For example, driving the speed limit can still be "reckless" if a driver is driving too fast for the weather conditions.

As an example, if a pilot crosses an active runway without requesting appropriate clearance, that could be considered careless or reckless operation on the ground. In the air, a common example of careless or reckless operation is "buzzing" people or objects on the ground. This is when a pilot flies lower than regulations permit. Pilots are responsible for their ground and air operations, at all times.

Slide 10: Subpart B covers more specific rules governing flight operations, including required preflight actions, the use of seat belts, aircraft right-of-way, rules for operations in the National Airspace System, and temporary flight restrictions.

Slide 11: For example, the lowest altitude a pilot is allowed to fly is governed by 91.119:

91.119 Minimum safe altitudes: General.
Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:
(a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
(b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
(c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely

populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

Teaching Tips

The red boldface font on this slide emphasizes the key phrases that describe where each part of this regulation applies. The black boldface font emphasizes the key phrases of the rule for each location.

Questions

What do you think this regulation means? Give students a few minutes to discuss their interpretation, then explain.

Importantly, these rules apply "except when necessary for takeoff and landing," because pilots will almost certainly be below these altitudes in the traffic pattern.

Pilots are not allowed to fly at any altitude they wish. Their minimum altitude is restricted by whatever they're flying over, whether that is the downtown area of a large city or an open cornfield in the Midwest. The people and structures on the surface, not the pilot, determine the lowest altitude to which an aircraft is permitted to fly. This is explained further on the following slide.

Slide 12: This regulation governs the lowest altitude at which pilots are permitted to fly when not under the direction of air traffic control (ATC). In general, if flying under ATC's control, the pilot flies at altitudes assigned by ATC.

Over congested areas, pilots may descend no lower than 1,000 feet above anything that is within 2,000 feet of their aircraft. For example, if a pilot flies over a 500-foot tall tower, they can descend no lower than 1,500 feet. In "other than congested areas", the pilot may descend to 500 feet above the surface. Over open water and "sparsely populated" areas, the pilot only has to stay 500 feet away from people, vehicles, and structures. This could mean the pilot can operate all the way down to the surface, so long as they stay 500 feet away from structures, other people, or vehicles.

This rule is sometimes summarized as "1,000 feet over congested and 500 feet over uncongested." However, neither Part 1 nor Part 91 defines "congested." Some people claim that "congested" refers to the yellow areas on the FAA VFR sectional chart, which generally represent population centers; this is very imprecise, however, and in any event is not an official definition for 91.119. In practice, most pilots try to stay 1,000 feet above population centers of any size.

The very first caveat in the regulation, however, is sometimes forgotten. According to 91.119(a), pilots must always fly at an altitude high enough that, if their engine were to fail, they could perform an emergency landing "without undue hazard" to people on the ground. Like "careless," "reckless," "congested," and "uncongested," "undue hazard" is also not defined. The altitude required by this regulation could very well be more than the 1,000 feet or 500 feet allowed in paragraphs (b) and (c). Pilots who lose their engines and consequently cause damage or injury on the ground could be found in violation of this portion of the regulation.

Slide 13: Subpart C covers aircraft equipment needed for different types of flying, as well as emergency equipment, lighting, required avionics, and other related equipment issues. For example, an entire regulation (91.205) is dedicated to listing the minimum required equipment for different types of flight.

Slide 14: FAR 91.205's description of the required equipment for day VFR flight is relatively straightforward. It begins with paragraph (a) highlighting the overall requirement:

91.205 Powered civil aircraft with standard category U.S. airworthiness certificates: Instrument and equipment requirements.
(a) General. Except as provided in paragraphs (c)(3) and (e) of this section, no person may operate a powered civil aircraft with a standard category U.S. airworthiness certificate in any operation described in paragraphs (b) through (f) of this section unless that aircraft contains the instruments and equipment specified in those paragraphs (or FAA-approved equivalents) for that type of operation, and those instruments and items of equipment are in operable condition.

Teaching Tips

Call attention to the exceptions called out in paragraph (a): "Except as provided in paragraphs (c)(3) and (e)…." Both paragraphs explicitly allow flight with inoperative equipment in very specific circumstances. These details are not critical to this discussion.

In short, to fly in the conditions listed in 91.205 (for example, "day, VFR," "night, VFR," "instrument conditions," etc.), the aircraft needs to have the equipment listed in each paragraph. Importantly, the equipment must be installed and operable. If the equipment fails, it no longer meets the requirements of the regulation. For example, 91.205(b)(1) requires every aircraft to have an operable airspeed indicator. An inoperable airspeed indicator would violate the regulations to fly the aircraft.

Slide 15: The slide shows a partial list of the equipment required for day, VFR operations:

(b) *Visual-flight rules (day).* For VFR flight during the day, the following instruments and equipment are required:
(1) Airspeed indicator.
(2) Altimeter.
(3) Magnetic direction indicator.
(4) Tachometer for each engine.
(5) Oil pressure gauge for each engine using pressure system.
(6) Temperature gauge for each liquid-cooled engine.
(7) Oil temperature gauge for each air-cooled engine.
(8) Manifold pressure gauge for each altitude engine.
(9) Fuel gauge indicating the quantity of fuel in each tank.
(10) Landing gear position indicator, if the aircraft has a retractable landing gear.
(11) A red or white anticollision light system.
(12) Flotation device if the aircraft is operated for hire over water.
(13) Approved safety belts.
(14) Approved shoulder harnesses. (for aircraft manufactured after July 1978)

As with the previous lesson's reading of Part 61, it is still important to understand the cross-references and exceptions in each paragraph. For example, a temperature gauge for each liquid-cooled engine is only required if the aircraft actually has a liquid-cooled engine.

Questions

Why do you think the shoulder harness requirement mentions July 1978?

Responses will vary based on the students' insights. Allow the students to discuss and propose ideas, and then explain:

Paragraph 14 is an example of how the regulations have changed over time. Note the dates in paragraph 14. "Small civil airplanes" manufactured after July 1978 require shoulder harnesses for each front seat, and those manufactured after December 1986 require shoulder harnesses in every seat. Prior to 1978, aircraft were only required to have lap belts.

Much like the automotive industry, the government does not require owners to update their old aircraft every time a new initiative (like shoulder harnesses) comes out. An airplane built before 1978 is airworthy and legal even if it only has lap belts. But an airplane of the same model sitting directly next to it on the ramp but built in 1987 would be non-airworthy if all it had were lap belts. A significant percentage of general aviation aircraft are older aircraft, so it is important to understand which rules apply to those aircraft—and which do not.

Slides 16-17: Subpart D covers some unique flight operations, including aerobatics, flight tests, towing, and other unusual flight operations like carrying candidates in elections. For example, section 91.303 specifies when pilots are allowed to perform aerobatic operations:

91.303 Aerobatic flight.
No person may operate an aircraft in aerobatic flight—
(a) Over any congested area of a city, town, or settlement;
(b) Over an open air assembly of persons;
(c) Within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;
(d) Within 4 nautical miles of the center line of any Federal airway;
(e) Below an altitude of 1,500 feet above the surface; or
(f) When flight visibility is less than 3 statute miles....

Questions

Based on the text of this regulation, can a private pilot perform aerobatics?

If the weather and location requirements of 91.303 are met, then a pilot may perform aerobatics. However, there are other factors this paragraph does not directly address. For example, if the pilot has a passenger, then they must wear parachutes (see 91.307(c)), and, of course, the aircraft must also be certified for aerobatics (see 14 CFR 23.2005).

The FAA does not have a training or certification requirement to fly aerobatics. So long as the aircraft and pilot meet these regulations, any pilot can perform aerobatics.

Slide 18: The FAR gives a definition of what constitutes aerobatic flight:

"For the purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight."

Paragraph 91.303 defines aerobatic flight as "abrupt" and "abnormal," terms that are somewhat subjective. Further down in the FARs, section 91.307 defines very specific bank and pitch attitudes at which parachutes are required; as a

result, some pilots use the 91.307 flight conditions as boundaries for "aerobatic," but those limits are not set by 91.303. Beyond those words, the general criteria of "a town, town, or settlement," "open air assembly of persons," and an altitude below 1,500 feet are relatively clear.

Teaching Tips

Some students may notice that these regulations would seem to prohibit airshows, where stunt pilots perform "abrupt" maneuvers in front of a crowd well below 1,500 feet. Airshow performances are permitted when the FAA grants waivers of these regulations.

Slide 19: Subpart E of Part 91 covers issues related to aircraft maintenance, including operations after maintenance is conducted, inspection schedules, and records. Although other FAR Parts contain the primary maintenance regulations (like FAR Part 43), Part 91 covers some maintenance areas as they pertain more directly to flight operations.

Slide 20: For example, FAR 91.403 specifies who is ultimately responsible for maintaining the aircraft:

91.403 General.
(a) The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with Part 39 of this chapter.

91.403 contains several important points on operations and aircraft maintenance. These points do not direct the standards of maintenance (that would generally be FAR Part 43), but rather the documentation and control of maintenance prior to the use of the aircraft. In the case of 91.403(a), the owner or operator, not the mechanic, responsible for keeping the aircraft airworthy. This FAR specifically calls out "compliance with Part 39," which is the FAR Part that covers airworthiness directives (ADs). ADs are much like a recall for an automobile; they are published by the government and often require action immediately or by a certain date, at which point the aircraft becomes unairworthy until the AD is complied with. Again, it is the responsibility of the owner/operator, not the mechanic, to make sure the aircraft complies with ADs.

Slides 21-26: Some questions on the FAA Private Pilot Knowledge Test will come from Part 91. Questions may resemble some that students have already seen, both in practices up to now as well as in the example questions at the end of most lessons. Use the following sample questions as models to demonstrate to the students how they might create questions that assess knowledge of the FARs (as they will do later in this lesson). For students unfamiliar with educational methods, some discussion may be necessary on how to create the wrong answers for multiple choice questions. Each question on the following slides pulls a key concept as the main statement, has a correct answer that completes the topic, and has two plausible alternatives. The alternatives may be based on an incorrect understanding of the concept, or they could be possible correct answers under slightly different circumstances.

Questions

1. An in-flight emergency requires a pilot to take immediate and abrupt action. The pilot may

A. not deviate from any Part 91 rule unless prior approval is given.
B. deviate from any Part 91 rule in order to deal with the emergency, and a written report must be submitted to the Administrator within 24 hours.
C. deviate from any Part 91 rule to the extent necessary to meet the emergency.

Answer: C, from 91.3(b)

2. During operations within controlled airspace at altitudes of less than 1,200 feet AGL, the minimum horizontal distance from clouds requirement for VFR flight is

A. 1,000 feet.
B. 1,500 feet.
C. 2,000 feet.

Answer: C, from 91.155(a)

3. In addition to other preflight actions for a VFR flight away from the vicinity of the departure airport, regulations specifically require the PIC to

A. calculate PAPI indications.
B. determine the runway lengths for the departure and arrival airports.
C. calibrate navigation equipment.

Answer: B, from 91.103(b)

Slides 27-35: Complete the **Formative Assessment**.

Formative Assessment

As a class, practice the following FAA-style questions from FAR Part 91. Because students may not be fully familiar with Part 91 yet, consider allowing students to look up the answers in Part 91 prior to revealing the correct answer. This will give them valuable practice for future situations when they need to answer a question but are unsure where in the FARs it is addressed.

1.
According to the FARs, who is directly responsible for, and the final authority as to, the operation of the aircraft?
A. The aircraft owner.
B. Air Traffic Control.
C. The pilot in command.

Answer: C, from Subpart A 91.3(a). This was covered in Grade 10, Unit 10, Section C, Lesson 1: Acting as Pilot in Command.

1.
What must pilots do if they are uncertain of an Air Traffic Control clearance?
A. Follow the clearance to the best of their understanding.
B. Immediately request clarification from ATC.
C. Take no action, but wait for ATC to re-issue a different clearance.

Answer: B, from Subpart B 91.123(a). This was covered in Grade 11, Unit 3, Section A, Lesson 5: Communications.

1.
Above what altitude is oxygen required after 30 minutes?
A. 10,000 feet MSL.
B. 12,500 feet MSL.
C. 14,000 feet MSL.

Answer: B, from Subpart C 91.211(a)(1). This was covered in Grade 11, Unit 8, Section B, Lesson 1: It's Getting Harder to Breathe.

1.
Where can a pilot find a description of aerobatic flight?

A. FAR 1.1.
B. FAR 91.307(d)(2)(i).
C. FAR 91.303.

Answer: C, as mentioned on slide 18, 91.303 describes aerobatic flight as intentional maneuvers involving abrupt or abnormal attitudes not necessary for normal flight.

[DOK-L1; *recall*]

EXTEND

Teacher Materials: FAR Part 91 Review Presentation, FAR Part 91 Review Teacher Notes 1, FAR Part 91 Review Teacher Notes 2
Student Materials: FAR Part 91 Review Student Activity 1, FAR Part 91 Review Student Activity 2, **print or electronic copy of FAR Part 91**

Session 2

Slide 36: Distribute **FAR Part 91 Review Student Activity 1**. Divide the class into groups and instruct them to write multiple choice FAA-style questions based on assigned sections of the FARs. Advise students to read, discuss, and review the regulations, and then work together to create questions that encourage learning and understanding of the concepts. Inform students that the questions they create will become the class study guide for the Summative Assessment. Additional information for this activity is available in **FAR Part 91 Review Teacher Notes 1**.

[DOK-L3; *construct,* DOK-L4; *create*]

Session 3

Slide 37: Complete **FAR Part 91 Review Student Activity 2**. You may choose to divide the class into four groups, with each group analyzing a scenario for potential violations of FAR Part 91. Alternatively, the scenarios may be completed as a class. Sample responses are available in **FAR Part 91 Review Teacher Notes 2**.

[DOK-L3; *assess*]

Following this activity, students should use any time remaining to study for the Summative Assessment on Part 91, which they will complete during the next session. If necessary, students may also use this time to continue writing questions or to assemble the study guide.

EVALUATE

Teacher Materials: FAR Part 91 Review Presentation, FAR Part 91 Review Teacher Notes 3
Student Materials: FAR Part 91 Review Student Activity 3, **print or electronic copy of FAR Part 91**

Session 4

Slide 38: Allow the students to study in groups using the study guide created in Session 2. Depending on the class makeup, plan to allocate approximately 20–30 minutes for the students to complete the 20-question Summative Assessment. Alternatively, consider developing an independent assessment using the student-developed questions from Session 2.

Conduct the **Summative Assessment**.

Summative Assessment

Distribute **FAR Part 91 Review Student Activity 3**. Instruct students to work individually and answer FAA-style test questions about 14 CFR 91. Each student should have access to a printed or electronic copy of FAR Part 91, and identify the regulation that supports each answer. Correct answers are provided in **FAR Part 91 Review Teacher Notes 3**.

[DOK-L1; *recall*]

Summative Assessment Scoring Rubric

- Follows assignment instructions
- Responses show evidence of correct recall of the content of FAR Part 91
- Contributions show understanding of the concepts covered in the lesson
- Contributions show in-depth thinking including analysis or synthesis of lesson objectives

Points	Performance Levels
9-10	Demonstrates a full understanding of the content of FAR Part 91. Answers 18-20 of the questions correctly.
7-8	Demonstrates a sufficient understanding of the content of FAR Part 91. Answers 14-17 of the questions correctly.
5-6	Demonstrates a partial understanding of the content of FAR Part 91. Answers 10-13 of the questions correctly.
0-4	Provides few, if any, correct ideas about the content of FAR Part 91. Answers less than 10 questions correctly.

STANDARDS ALIGNMENT

COMMON CORE STATE STANDARDS

- **RST.11-12.2** - Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- **RST.11-12.4** - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 11-12 texts and topics*.
- **RST.11-12.9** - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
- **WHST.11-12.6** - Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
- **WHST.11-12.7** - Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **WHST.11-12.8** - Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
- **WHST.11-12.9** - Draw evidence from informational texts to support analysis, reflection, and research.

REFERENCES

www.ecfr.gov