

SESSION 24: AIRCRAFT SYSTEMS — INOPERATIVE EQUIPMENT: MEL, KOEL, AND 14 CFR 91.213

1. An aircraft WITHOUT an approved Minimum Equipment List operates under inoperative-equipment rules found in:

- A. 14 CFR §91.213(d)
- B. 14 CFR §91.205(b)
- C. The aircraft's weight and balance section
- D. 14 CFR §91.103

2. Under §91.213(d), the first determination for an inoperative item is whether it is part of:

- A. The VFR-day type certificate or the §91.205 equipment requirements
- B. The optional avionics package only
- C. The cabin comfort systems
- D. The aircraft's paint and placarding

3. If an inoperative item is NOT required by the type certificate, §91.205, an AD, or other rule, the next step under §91.213(d) is to:

- A. Ground the aircraft until repaired
- B. Remove or deactivate the item and placard it "INOPERATIVE," or have a mechanic defer it
- C. Continue flight with no further action
- D. Obtain a special flight permit

4. Under §91.213(d), an inoperative item that is not required may be deferred only after it is:

- A. Logged by the pilot in the flight plan
- B. Reported to the destination FSDO
- C. Replaced with a placeholder component
- D. Either removed/deactivated and placarded, or deferred by a certificated mechanic, with no hazard created

5. A "KOEL" is the:

- A. Kinds of Operations Equipment List in the POH/AFM
- B. Known Operations Emergency Logbook
- C. Key Operating Electrical Limits
- D. Kollsman Operating Equipment Limitations

6. The KOEL specifies the equipment required for:

- A. Only the annual inspection
- B. Weight and balance computations
- C. Different kinds of operations, such as VFR day, VFR night, IFR day, and IFR night
- D. Engine overhaul intervals

7. Before deferring an inoperative item under §91.213(d), the pilot must determine the item is not required by any of: the VFR-day type certificate, §91.205, an Airworthiness Directive, OR:

- A. The aircraft's paint scheme
- B. The destination weather
- C. The KOEL/equipment list for the kind of operation
- D. The pilot's personal minimums

8. An aircraft WITH an approved MEL must operate inoperative equipment in accordance with:

- A. §91.213(d) general provisions
- B. The specific provisions and conditions of that MEL
- C. The pilot's discretion alone
- D. The manufacturer's marketing materials

9. A pilot finds the aircraft has an inoperative attitude indicator before a planned IFR flight. Regarding §91.213:

- A. The item may simply be placarded and the flight conducted IFR
- B. The flight may proceed VFR night without restriction
- C. The attitude indicator is required for IFR (GRABCARD/§91.205(d)); the aircraft is not airworthy for IFR until repaired
- D. The item may be deferred indefinitely with no action

10. Placarding an inoperative item "INOPERATIVE" serves to:

- A. Satisfy a marketing requirement
- B. Document the weight and balance change
- C. Alert the crew that the item is not to be used and has been properly deferred
- D. Replace the need to log the discrepancy

11. An inoperative item that IS required by §91.205 for the intended operation:

- A. May be placarded and the flight conducted normally
- B. Renders the aircraft unairworthy for that operation until repaired or a special authorization is obtained
- C. May be deferred by the pilot for up to 10 days
- D. Has no effect on airworthiness

12. Under §91.213(d), even a non-required inoperative item may NOT be deferred if its inoperative state:

- A. Is documented in the logbook
- B. Has been placarded properly
- C. Was deferred by a mechanic
- D. Constitutes a hazard or interferes with required equipment

13. A landing light is inoperative on an aircraft not operated for hire, planning a daytime IFR flight. The light is:

- A. Required for all IFR operations
- B. Required by §91.205(d) for IFR
- C. Part of the GRABCARD list
- D. Not required for the operation; it may be deactivated/placarded and the flight may proceed

14. The "Kinds of Operations Equipment List" approach to airworthiness is most directly tied to:

- A. The transponder inspection cycle
- B. The fuel reserve computation
- C. Verifying required equipment for the specific kind of operation (e.g., IFR night)
- D. The VOR check tolerance

15. A pilot must consult the KOEL because an item not on the §91.205 list might still be:

- A. Optional under all conditions
- B. Required by the aircraft's type design for the specific kind of operation
- C. Removable without any documentation
- D. Relevant only to the weight and balance

16. An MEL, once approved for a specific aircraft, becomes:

- A. A marketing document with no regulatory force
- B. Optional guidance the pilot may disregard
- C. Identical to §91.213(d) for that aircraft
- D. A regulatory document the operator must follow precisely, including repair categories and conditions

17. A pilot of an aircraft without an MEL who discovers an inoperative, non-required item just before an IFR flight may:

- A. Deactivate or remove the item, placard it "INOPERATIVE," confirm no hazard, and proceed if the item is not required
- B. Disregard it entirely with no action
- C. Only proceed after a 100-hour inspection
- D. Only proceed VFR for the remainder of the day

18. When a mechanic defers an inoperative item under §91.213(d), the deferral involves:

- A. Making a maintenance record entry and ensuring the item is deactivated/placarded as appropriate
- B. Submitting the deferral to the FAA for approval
- C. Issuing a new airworthiness certificate
- D. Notifying the destination tower

19. A pilot reasoning through an inoperative DME before a low-altitude IFR flight (below FL240) where the route does not require DME concludes:

- A. The flight is grounded; DME is always required for IFR
- B. DME must be placarded and the annual re-accomplished
- C. If DME is not required for the route/operation and not on the KOEL/§91.205 for it, it may be deferred and the flight may proceed

D. A special flight permit is required

20. The fundamental difference between operating under an MEL and under §91.213(d) is that the MEL:

A. Eliminates the need to placard inoperative items

B. Provides specific, FAA-approved relief with defined conditions and repair intervals for that aircraft

C. Applies only to turbine aircraft

D. Removes all inoperative-equipment restrictions

21. A pilot finds the aircraft's turn coordinator inoperative before an IFR flight in an aircraft without an MEL. The correct conclusion is:

A. It may be placarded and the IFR flight conducted

B. It is required only for night operations

C. The turn coordinator is required for IFR (§91.205(d)); the aircraft is not airworthy for IFR until repaired

D. It may be deferred by the pilot for 30 days

22. Verifying inoperative-equipment status is part of the broader preflight task of determining:

A. The aircraft's airworthiness for the intended operation

B. The required fuel reserve

C. The alternate airport minimums

D. The enroute cruising altitude

23. A special flight permit (ferry permit) may be needed when:

A. The pilot wants to upgrade the avionics

B. An inoperative non-required item is properly placarded

- C. The aircraft is current on all inspections
- D. The aircraft does not meet airworthiness requirements but must be flown to a location for repair

24. The §91.213(d) decision process ultimately protects safety by ensuring that:

- A. The aircraft always carries every possible piece of equipment
- B. Inoperative items are never documented
- C. The pilot defers every decision to maintenance
- D. No required equipment is missing and no inoperative item creates a hazard for the intended flight

25. A complete inoperative-equipment determination integrates §91.213, §91.205, ADs, and the KOEL to answer the single question:

- A. What is the aircraft's resale value?
- B. Is the aircraft airworthy and legal for this specific operation with this item inoperative?
- C. What is the required alternate?
- D. How much fuel is required?

ANSWER KEY & EXPLANATIONS – SESSION 24

1. A. §91.213(d) — An aircraft without an approved MEL operates under the inoperative-equipment provisions of 14 CFR §91.213(d).

2. A. TC or §91.205 — The first determination is whether the item is part of the VFR-day type certificate or the §91.205 equipment requirements.

3. B. Deactivate/placard or defer — If not required, the next step is to remove/deactivate and placard the item "INOPERATIVE," or have a mechanic defer it.

4. D. Removed/placarded or deferred, no hazard — A non-required item may be deferred only after being removed/deactivated and placarded, or deferred by a mechanic, with no hazard created.

5. A. Kinds of Operations Equipment List — KOEL is the Kinds of Operations Equipment List in the POH/AFM.

6. C. Equipment per kind of operation — The KOEL specifies equipment required for different kinds of operations (VFR day/night, IFR day/night).

7. C. KOEL/equipment list — The item must also not be required by the KOEL/equipment list for the kind of operation.

8. B. That MEL's provisions — An aircraft with an approved MEL must operate inoperative equipment per the specific provisions and conditions of that MEL.

9. C. Not airworthy for IFR — The attitude indicator is required for IFR (GRABCARD/§91.205(d)); the aircraft is not airworthy for IFR until repaired.

10. C. Alert crew/proper deferral — Placarding "INOPERATIVE" alerts the crew the item is not to be used and has been properly deferred.

11. B. Unairworthy until repaired — A §91.205-required inoperative item renders the aircraft unairworthy for that operation until repaired or specially authorized.

12. D. Hazard/interference — Even a non-required item may not be deferred if its inoperative state constitutes a hazard or interferes with required equipment.

13. D. Not required, may proceed — A landing light on a not-for-hire daytime IFR flight is not required; it may be deactivated/placarded and the flight may proceed.

14. C. Required equipment per operation — The KOEL is tied to verifying required equipment for the specific kind of operation (e.g., IFR night).

15. B. Required by type design — The KOEL must be consulted because an item not on the §91.205 list might still be required by the aircraft's type design for the specific operation.

16. D. Must follow precisely — An approved MEL is a regulatory document the operator must follow precisely, including repair categories and conditions.

17. A. Deactivate/placard/proceed — Without an MEL, the pilot may deactivate or remove the non-required item, placard it, confirm no hazard, and proceed.

18. A. Maintenance record + placard — A mechanic's deferral involves a maintenance record entry and ensuring the item is deactivated/placarded as appropriate.

19. C. Defer if not required — If DME is not required for the route/operation and not on the KOEL/§91.205 for it, it may be deferred and the flight may proceed.

20. B. FAA-approved relief — The MEL provides specific, FAA-approved relief with defined conditions and repair intervals for that aircraft.

21. C. Not airworthy for IFR — An inoperative turn coordinator is required for IFR (§91.205(d)); the aircraft is not airworthy for IFR until repaired.

22. A. Airworthiness determination — Verifying inoperative-equipment status is part of determining the aircraft's airworthiness for the intended operation.

23. D. Ferry for repair — A special flight permit may be needed when the aircraft does not meet airworthiness requirements but must be flown to a location for repair.

24. D. No required missing, no hazard — The §91.213(d) process protects safety by ensuring no required equipment is missing and no inoperative item creates a hazard for the flight.

25. B. Airworthy for this operation? — A complete determination answers whether the aircraft is airworthy and legal for this specific operation with this item inoperative.