

Element Performance Inspection (EPI)

1.1.1 Aircraft Airworthiness (AW)

Purpose of this Element (Air Carrier's responsibility):

To ensure the Air Carrier maintains airworthy aircraft, engines, and appliances.

Objective (FAA responsibility):

To determine if the Air Carrier adheres to Aircraft Airworthiness requirements, procedures, and controls.

Specific Instructions for this EPI:

To accomplish this EPI, the inspector will inspect the Air Carrier's aircraft, powerplants, and appliances during in service operation. Further, the inspector will observe overhaul, "heavy maintenance," intermediate level maintenance, periodic service and maintenance, preventative maintenance, and repair/alteration activities. The purpose of the inspection and observation is to determine the airworthiness condition (visual inspection, safe for flight) and airworthiness status (records conformity, Type Certificate Data Sheet (TCDS), etc.) of the Air Carrier's aircraft. This would include installed powerplants, and appliances at various maintenance and operational locations, to discern the airworthiness condition and status of the Air Carrier's aircraft.

The inspector is not expected to accomplish a complete aircraft, installed powerplant and an appliance conformity inspection. The inspector should perform a "spot check" of specific targeted conformity requirements for each inspection activity accomplished.

Task 4. Appropriate personnel are managers, supervisors, and aviation technicians.

Related EPIs:

- 1.1.2 Appropriate Operational Equipment (AW)
- 1.3.3 Maintenance Facility / Main Maintenance Base (AW)
- 5.1.1 Line Stations (AW)

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To meet this objective, the inspector will accomplish the following tasks (at the inspection locations where applicable):

1. Review the FAA Guidance and Specific Regulatory Requirements (SRR) included in the supplemental information section of this EPI.
2. Review the associated SAI, with emphasis on the Controls Attribute section.
3. Review the Air Carrier's manual related to aircraft airworthiness requirements.
4. Discuss the Air Carrier's airworthiness requirements with Air Carrier personnel.
5. Review completed maintenance and quality assurance records.
6. Inspect and assess Air Carrier aircraft, powerplants, and appliances airworthiness condition.
7. Review and assess Air Carrier aircraft, powerplants, and appliances airworthiness status records.

To meet this objective, the inspector will answer the following questions:

1. Were the following performance measures met:

<i>1.1 The observed Air Carrier aircraft appeared to be maintained in an airworthy condition (visual inspection of the aircraft).</i>	<input type="checkbox"/> YES	If no, explain:
	<input type="checkbox"/> NO	
<i>1.2 The observed Air Carrier aircraft appeared to be maintained in an airworthy status (review of Aircraft Airworthiness status and compliance records).</i>	<input type="checkbox"/> YES	If no, explain:
	<input type="checkbox"/> NO	
2. Were the Aircraft Airworthiness requirements, maintenance program procedures followed?

	<input type="checkbox"/> YES	If no, explain:
	<input type="checkbox"/> NO	
3. Were the Aircraft airworthiness requirements, maintenance program controls followed?

	<input type="checkbox"/> YES	If no, explain:
	<input type="checkbox"/> NO	
4. Did all observed maintenance records comply with procedures for the Aircraft Airworthiness requirements?

	<input type="checkbox"/> YES	If no, explain:
	<input type="checkbox"/> NO	
5. <Deleted>

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SUPPLEMENTAL INFORMATION

SRRs:

- 14 CFR 121.151, “Applicability (Aircraft Requirements).”
- 14 CFR 121.153 (a), “Aircraft requirements: general.”
- 14 CFR 121.157 (a-h), “Aircraft certification and equipment requirements.”
- 14 CFR 121.161 (b, c), “Airplane limitations: type of route.”
- 14 CFR 121.221 (a-f), “Fire precautions.”
- 14 CFR 121.223, “Proof of compliance with 14 CFR 121.221.”
- 14 CFR 121.225, “Propeller deicing fluid.”
- 14 CFR 121.231 (a-d), “Fuel system lines and fittings.”
- 14 CFR 121.233, “Fuel lines and fittings in designated fire zones.”
- 14 CFR 121.235 (a-c), “Fuel valves.”
- 14 CFR 121.237, “Oil lines and fittings in designated fire zones.”
- 14 CFR 121.239 (a, b), “Oil valves.”
- 14 CFR 121.241, “Oil system drains.”
- 14 CFR 121.243 (a-c), “Engine breather lines.”
- 14 CFR 121.245, “Fire walls.”
- 14 CFR 121.247 (a-d), “Fire wall construction.”
- 14 CFR 121.259 (a, b), “Lines and fittings.”
- 14 CFR 121.261, “Vent and drain lines.”
- 14 CFR 121.263 (a, b), “Fire-extinguishing systems.”
- 14 CFR 121.265, “Fire-extinguishing agents.”
- 14 CFR 121.271 (a, b), “Fire-extinguishing system materials.”
- 14 CFR 121.273, “Fire-detector systems.”
- 14 CFR 121.285 (b), “Carriage of cargo in passenger cargo compartments.”
- 14 CFR 121.303 (b-d), “Airplane instruments and equipment.”
- 14 CFR 121.305 (a-k), “Flight and navigational equipment.”
- 14 CFR 121.309 (a, b, e), “Emergency equipment.”
- 14 CFR 121.310 (a-m), “Additional emergency equipment.”
- 14 CFR 121.311 (c, d, f, g, i), “Seats, safety belts, and shoulder harnesses.”
- 14 CFR 121.312 (a-d), “Materials for compartment interiors.”
- 14 CFR 121.317 (a, c-e, j, l), “Passenger information.”
- 14 CFR 121.318 (a-g), “Public address system.”
- 14 CFR 121.337 (a, b), “Protective breathing equipment.”
- 14 CFR 121.341 (b, c), “Equipment for operations in icing conditions.”
- 14 CFR 121.345 (a-c), “Radio equipment.”
- 14 CFR 121.347 (a, b), “Radio equipment for operations under VFR over routes navigated by pilotage.”
- 14 CFR 121.349 (a-e), “Radio equipment for operations under VFR over routes not navigated by pilotage or for operations under IFR or over-the-top.”
- 14 CFR 121.357 (a, c), “Airborne Weather Radar Equipment Requirements.”
- 14 CFR 121.359 (a, c, d, g, h), “Cockpit voice recorders.”

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- 14 CFR 121.360 (a, e, f), “Ground proximity warning/glide slope deviation alerting system.”

Other CFRs and FAA Guidance:

- 14 CFR 43.13, “Performance Rules (General).”
- 14 CFR 43.15, “Additional Performance Rules for Inspections.”
- 14 CFR 91.805, “Final compliance: subsonic airplanes.”
- 14 CFR 121.151, “Applicability (Aircraft Requirements).”
- 14 CFR 121.211 (b-e), “Applicability.”
- 14 CFR 121.215 (a-e), “Cabin interiors.”
- 14 CFR 121.217, “Internal doors.”
- 14 CFR 121.219, “Ventilation.”
- 14 CFR 121.227 (a, b), “Pressure cross-feed arrangements.”
- 14 CFR 121.229 (a-c), “Location of fuel tanks.”
- 14 CFR 121.249 (a, b), “Cowlings.”
- 14 CFR 121.251, “Engine accessory section diaphragm.”
- 14 CFR 121.253 (a), “Powerplant fire protection.”
- 14 CFR 121.255 (a, b), “Flammable fluids.”
- 14 CFR 121.257 (a-d), “Shutoff means.”
- 14 CFR 121.267, “Extinguishing agent container pressure relief.”
- 14 CFR 121.269, “Extinguishing agent container compartment temperature.”
- 14 CFR 121.275, “Fire detectors.”
- 14 CFR 121.277 (a), “Protection of other airplane components against fire.”
- 14 CFR 121.279 (a, b), “Control of engine rotation.”
- 14 CFR 121.281 (a), “Fuel system independence.”
- 14 CFR 121.283, “Induction system ice prevention.”
- 14 CFR 121.289 (a, b), “Landing gear: aural warning device.”
- 14 CFR 121.293, “Special airworthiness requirements for nontransport category airplanes type certificated after December 31, 1964.”
- 14 CFR 121.301, “Applicability (Instrument and Equipment Requirements).”
- 14 CFR 121.307 (a-l), “Engine instruments.”
- 14 CFR 121.308 (a, b, d), “Lavatory fire protection.”
- 14 CFR 121.313 (a-g), “Miscellaneous equipment.”
- 14 CFR 121.314 (a), “Cargo and baggage compartments.”
- 14 CFR 121.316, “Fuel tanks.”
- 14 CFR 121.319 (a, b), “Crewmember interphone system.”
- 14 CFR 121.342, “Pitot heat indication systems.”
- 14 CFR 121.343 (j-l), “Flight recorders.”
- 14 CFR 121.344 (a-k), “Digital flight data recorders for transport category airplanes.”
- 14 CFR 121.344a (a-f), “Digital flight data recorders for 10-19 seat airplanes.”
- 14 CFR 121.356 (a-c), “Traffic alert and collision avoidance system.”
- 14 CFR 121.361, “Applicability (Maintenance, Preventative Maintenance, and Alterations).”
- 14 CFR 121.363 (a, b), “Responsibility for Airworthiness.”
- 14 CFR 121.365, “Maintenance, Preventative maintenance, and Alteration Organization.”

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- 14 CFR 121.367, “Maintenance, Preventative maintenance, and Alteration Programs.”
- 14 CFR 121.369, “Manual Requirements.”
- 14 CFR 121.371, “Required Inspection Personnel.”
- 14 CFR 121.375, “Training Program.”
- 14 CFR 121.377, “Duty Time limitation.”
- 14 CFR 121.378 (a), “Certificate Requirements.”
- 14 CFR 121.379, “Authority to Perform Maintenance.”
- 14 CFR 121.701 (a, b), “Aircraft Maintenance Log.”
- 14 CFR 121.707, “Alteration and Repair Reports.”
- 14 CFR 121.709, “Airworthiness Release.”
- FAA Order 8300.10, Vol. 3, Chap. 2, “Conduct Spot Inspection of Operator’s Aircraft.”
- Refer to Advisory Circulars using a search engine (such as ATP Navigator or Summit).