

9100 AEROSPACE INDUSTRY SPECIFIC COURSE CHECKLIST

(Formerly the in-depth/competency course.)

LEARNING OBJECTIVES		OBJECTIVE STATED/COVERED IN COURSE PLAN	
A	Explain the quality perspective of the aerospace industry.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
B	Describe in overview CAA roles, responsibilities, and regulations, including how to obtain additional information.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
C	Describe the principles of military aerospace requirements and regulations, including how to obtain additional information.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
D	Describe in overview government space organization roles, responsibilities, and regulations, including how to obtain additional information.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
E	Describe in overview airworthiness and aviation safety requirements, including how to obtain additional information.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
F	Describe the design, development, verification, and validation processes specific to the aerospace industry.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
G	Describe control of production and service provision.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
H	Explain the process of first article inspection (see 9102).	<input type="checkbox"/> YES	<input type="checkbox"/> NO
I	Describe aerospace material traceability requirements.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
J	Describe aerospace material/parts status accountability systems.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
K	Identify aerospace subcontractor approval and control requirements.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
L	Explain variation management of key characteristics (see 9103).	<input type="checkbox"/> YES	<input type="checkbox"/> NO
M	Describe flow down of quality requirements.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
N	Explain FOD prevention program requirements.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
O	Describe use of customer supplied products.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
P	Explain calibration controls and positive recall system.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Q	Describe acceptance authority media (i.e., use of stamps, stamp control, electronic sign off).	<input type="checkbox"/> YES	<input type="checkbox"/> NO
R	Identify special processes.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
S	Identify nonconforming material, system requirements, and operation.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
T	Explain sampling inspection requirements and limitations.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
U	Identify configuration management/requirements control.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
V	Describe tool control.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
W	Describe the product qualification process.	<input type="checkbox"/> YES	<input type="checkbox"/> NO

X	Describe/explain source approval process.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
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The aviation authorities and regulations covered in the course shall be applicable to the region in which the course is being presented.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
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30% (8 hours) of the total course time shall be used for active participation in workshop, case studies, role-playing, and/or actual auditing of an organization as part of the structured class activities.	ESTIMATED TIME: _____	ACTUAL TIME: _____
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The total course time devoted to direct instruction and to assigned team and individual activities shall be at least 26 hours , plus an additional hour for the written examination.	ESTIMATED COURSE TIME: _____	ESTIMATED EXAM TIME: _____
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EVALUATOR NOTES:	
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NO.	TRAINING ITEM / LEARNING OBJECTIVE	TRAINING SUBJECTS	MET	ESTIMATED HOURS	ACTUAL HOURS
1	Aerospace industry quality perspective.	History of the standard, reasons for introduction, relation with airworthiness requirements.	<input type="checkbox"/>	1	
2	CAA requirements.	Difference between customer quality requirements and airworthiness requirements. Major content of EASA Part 21 and part 145, relation to FAR requirements, Design Organization Approval (DOA), Production Organization Approval (POA), and Manufacturing Organization Approval (MOA) approvals; type certification, supplier control principles, certifying staff, accountable manager, and use of EASA Form 1.	<input type="checkbox"/>	2.5	
3	Principles of military aerospace requirements and regulations.	Use of Allied Quality Assurance Publication (AQAP), status, military as customers, relation to contractual requirements.	<input type="checkbox"/>	1	
4	Principles of space requirements and regulations.	Government space organization roles, responsibilities, and standards.	<input type="checkbox"/>	1	
5	First Article Inspection (FAI) (see 102).	Purpose of FAI, structure and use of 9102, and supporting forms.	<input type="checkbox"/>	2	
6	Airworthiness and safety requirements.	See CAA requirements, difference and relation between safety and quality; responsibility of supplier and customer; and position of OEM and subcontractor.	<input type="checkbox"/>	Included in No. 2	
7	Design, development, verification, and validation.	The management model for design, design and change control, difference between verification and validation; type certification and approved design data.	<input type="checkbox"/>	2	
8	Aerospace material traceability requirements.	Upwards and downwards traceability, lot control, serialized items, marking, records for traceability, and traceability of raw material.	<input type="checkbox"/>	1	
9	Aerospace material accountability system.	Accounting for all parts during manufacturing (e.g., split batches).	<input type="checkbox"/>	0.5	

10	Aerospace subcontractor approval and control requirements.	Responsibility for quality, supplier auditing, Approved Supplier List, function of incoming and source inspection.	<input type="checkbox"/>	2	
11	Variation management of key characteristics (see 9103).	Principles of statistical control, attributive and contributive measuring, Cp and Cpk, 6 Sigma, method(s) and approach to reduce variation, and criteria to establish key characteristics.	<input type="checkbox"/>	2	
12	Flow down of quality requirements.	Sub-tier control, role of the contract, and purchasing data.	<input type="checkbox"/>	Included in No. 10	
13	Foreign Object Damage/Debris (FOD) prevention program requirements.	Definition of FOD, FOD prevention, FOD inspections/detections, and FOD audits.	<input type="checkbox"/>	1	
14	Use of customer supplied products.	Responsibility for quality of customer supplied product and use of customer approved sources.	<input type="checkbox"/>	0.5	
15	Calibration controls and positive recall system for monitoring and measuring devices.	Description of 'positive' recall, administration, use of stickers, release after calibration, sub- contracting of calibration, and actions in case of 'out of calibration'.	<input type="checkbox"/>	1	
16	Acceptance authority media.	Use of stamps, stamp control, marking, and electronic sign off.	<input type="checkbox"/>	1	
17	Nonconforming material system requirements and operation.	Responsibilities, identification, quarantine rules, Material Review Board, dispositions, release of nonconforming products, and records.	<input type="checkbox"/>	2	
18	Sampling inspection requirements and limitations.	Use of sampling techniques and sampling standards.	<input type="checkbox"/>	1	
19	Tool control.	Control of tool including traceability, 'positive' recall, administration, use of stickers, and release after calibration.	<input type="checkbox"/>	0.5	
20	Special processes.	Definition of special processes, examples of special processes, special process qualification, control, and special process audits.	<input type="checkbox"/>	2	

21	Configuration management/requirements control.	Definition/description of configuration management, configuration management policy, Configuration Items (CI), configuration control, configuration auditing, relation with traceability requirements, and configuration changes.	<input type="checkbox"/>	2	
				26	