



U.S. Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave., SW
Washington, DC 20591

MAR 20 2002

Mr. Dale Gordon
Americas Aerospace Quality Group (AAQG)
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Mail Stop: U-24
Indianapolis, IN. 46206-0420

Dear Mr. Gordon:

In November 2000 the Federal Aviation Administration (FAA) was asked to review the AS9100 Quality Systems – Aerospace – Model for Quality Assurance in Design, Development, Production, Installation, and Servicing as a quality system standard for aviation related entities.

During the comprehensive review, the FAA determined that AS9100 (issued 1999-11) to be a comprehensive quality standard containing the basic quality control/assurance elements required by the current Code of Federal Regulations (CFR), Title 14, Part 21. A letter was issued stating that those organizations that chose to implement AS9100, as a foundation for their quality management systems should also ensure that all applicable elements found in CFR Title 14, Part 21 were also addressed.

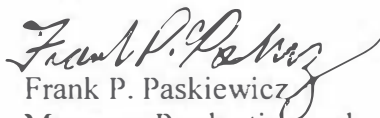
During the past year your committee reviewed the standard as compared to the matrix that showed the correlation of the AS9100 standard to the regulatory requirements and the current Aircraft Certification System Evaluation Program (ACSEP) criteria. Revision A to the AS9100 standard has been developed and another review has been requested.

The Production and Airworthiness Division (AIR-200) has conducted the review utilizing Revision A of AS9100. The Aircraft Certification Service still believes that the effective implementation of AS9100 – Rev A will continue to enhance an organization's overall performance. The statement found in Section 1, 1. Scope, 1.1 General: states "*It is emphasized that the quality management system requirements specified in the standard are complementary (not alternative) to contractual and applicable law and regulatory requirements.*" is still a requirement that must be adhered to. The Production and Airworthiness Division has also attached a matrix that correlates the AS9100 – Rev A criteria to the regulatory requirements, the current ACSEP survey criteria and the ACSEP Phase II survey criteria.

In stating that AS9100 – Rev A meets the FAA's expectations, for a manufacturing quality control system, again the FAA is not accepting the registration of quality systems by third parties, to any standard, as compliance to CFR Title 14, Part 21. This is due in that the FAA has no control over their contents, they can be changed by the industry, and they possess no regulatory requirements or enforcement capability. CFR Title 14, Part 21 is the regulatory requirement for FAA production approval holders and it remains their responsibility to demonstrate compliance, including that of their suppliers, to all applicable sections. Any use of third party quality system surveillance is considered a supplier activity by the FAA and must be appropriately controlled.

The Aircraft Certification Service applauds the efforts of the Americas Aerospace Quality Group (AAQG) in taking a leadership role in enhancing aviation quality. If we can be of further assistance, please feel free to contact a member of the Production and Airworthiness Certification Division at (202) 267-8361.

Sincerely,



Frank P. Paskiewicz
Manager, Production and
Airworthiness Certification Division

AS-9100-Revision A

Quality System Model for Quality Assurance in Design, Development, Production, Installation and Servicing - FAR & ACSEP Evaluation Criteria Correlation

AS-9100 Revision A Elements	FAR	Current ACSEP Criteria	Phase II
4.1 Management Responsibilities			
4.1.1 Quality Policy		1M1,1M5, 1M2, 1Q4	103, 104
4.1.2 Organization			
4.1.2.1 Responsibility and Authority	21.123, 21.143, 21.607	1Q1, 1Q2, 1Q3, 1Q4, 1M1, 1M2, 1M3, 1E1, 1E2, 1P1, 1P2, 1S1, 1S2, 14S3, 14C2	105, 104, 103
4.1.2.2 Resources	21.123, 21.143, 21.303	1P3, 1S3, 1C3, 5Q1, 4Q7	105, 104, 103
4.1.2.3 Management Representative	21.143	1Q4, 1Q2, 14C3, 1C1, 1C2, 1C3, 14C1, 14S1, 14S2	105
4.1.2.4 Process Performer		14S4, 14S5, 14C5	
4.1.3 Management Review		1M5, 1M6, 15M2	104
4.2 Quality System			
4.2.1 General	21.123, 21.143, 21.605	1Q4, 1M6	105
4.2.2 Quality System Procedures	21.143, 21.605	1M6, 1Q4, 14C3, 1Q6, 14C1	105
4.2.3 Quality Planning	21.143, 21.303, 21.607	1M1, 1M5, 1M6, 1Q5, 14S3, 14C2,	105
4.2.4 Configuration Management			
4.3 Contract Review			
4.3.1 General			
4.3.2 Review			
4.3.3 Amendment to a Contract			
4.3.4 Records			
4.4 Design Control			
4.4.1 General	21.611	2E1, 2E3, 2P1, 2Q1, 2S1, 2E8	Section 2 Part A
4.4.2 Design & Development Planning		2E1, 2E3, 2E7, 2E9, 2P1, 2Q1, 2S1	
4.4.3 Organizational & Technical Interfaces		2P1, 2Q1, 2S1, 2E8, 11E1	203
4.4.4 Design Input		2E9, 2E8, 2E4, 2E5	112
4.4.5 Design Output	21.605	2E3, 2S2, 2S3, 2C3, 2C4	209, 208, 210, 115
4.4.6 Design Review		2P1, 2Q1, 2S1	203, 113
4.4.7 Design Verification	21.607	2E7, 2P1, 2Q1, 2S1, 2E3, 4E2, 5E2	
4.4.8 Design Validation	21.125, 21.143, 21.303, 21.607	8C1, 8E1, 8E2	204
4.4.9 Design Changes	21.125, 21.303, 21.611	2E3, 2E4, 13E1, 2E5, 2S2, 2C3	205, 206, 207
4.5 Document and Data Control			
4.5.1 General		1Q6, 2E2, 5Q5, 7Q12, 8Q3, 9Q9, 10Q12, 14S2, 17Q5	108
4.5.2 Document and Data Approval and Issue		1M5, 1M6, 2E1, 2E10, 2P1, 2Q1, 2S1, 2C3, 4P1, 4P5, 8P1, 8Q1, 8C1, 8C3, 10Q6, 12Q8	106, 205
4.5.3 Document and Data Changes		4P5, 4P2, 4P3	203, 204, 205, 206, 207, 208

AS-9100 Elements	FAR	Current ACSEP Criteria	Phase II
4.6 Purchasing			
4.6.1 General		4P7, 4P8, 4Q8, 4Q9, 10Q8, 10Q9, 10Q10, 10Q11	Section 6
4.6.2 Evaluation of Subcontractors		10Q2, 10Q4, 10Q1	Section 6
4.6.3 Purchasing Data		10Q6, 10Q5, 10C2, 10C1	Section 6
4.6.4 Verification of Purchased Product		10Q10, 10C1, 10Q8, 10Q9	Section 6
4.7 Control of Customer Supplied Product		10Q4	
4.8 Product Identification and Traceability	45.11, 21.607	10Q8, 10Q9, 10Q11, 12Q5, 4P8, 4P9, 4Q8, 4Q9	418, 419, 420, 427, 428
4.9 Process Control			
4.9.1 General		4P1, 4P2, 4P3, 4P4, 4P6, 4Q1, Q2, 4Q5, 4Q7, 4Q11, 4Q12, Section 5, 7Q9, 7Q10, 7Q11, Section 9, 12Q1, 12Q2, 12Q3, 12Q4, 12Q5, 12Q7, 12Q8	401, 403, 407, 409, 410, 412, 415, 416, 417, 418, 422, 424, 427, 508, 507, 510, 513, 517, 520, 522
4.9.1.1 Production Documentation		4P2, 4P4, 4P5, 4P6, 4Q1, 7P1, 7Q2, 7Q9, 7Q10,	401, 402, 403, 405, 406, 409, 410, 422, 517, 520
4.9.1.2 Control of Production Process Changes		4E2, 4P1, 4P5, 2Q1, 2S1, 2P1, 4P4, 4Q11, 4Q12, 5Q1	407, 401, 403, 421, 517, 522
4.9.1.3 Control of Production Equipment, Tools, and Numerical Control (NC) Machine Programs		7Q3, 7Q6, 7Q8, 7Q9, 7Q10, 7Q11, 7Q14	406, 404, 508, 507, 510, 518, 520, 522
4.9.1.4 Control of work occasionally performed outside the supplier's facility		SECTION 10	602, 607, 613, 611, 614
4.9.2 Special Processes		SECTION 5, 9Q1, 9Q2	404, 406, 402
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4.10.2 Receiving Inspection and Testing		10Q10, 10Q11, 10Q12, 11Q1, 11Q2, 10C1, 10C3, 4Q1, 4P8, 8P1, 8Q1, 10Q12	413, 414, 415, 416, 417, 418
4.10.3 In-process Inspection and Testing	21.125, 21.128, 21.143, 21.303,	4P2, 4P4, 4P7, 4Q1, 8E1, 8P1, 8Q1, 8Q3, 8Q4, 8C3, 9Q11, 9Q12, 9Q13, 9Q13, 9Q15, 4Q2,	408, 409, 410, 411
4.10.4 Final Inspection and Testing		4Q2, 8C1, 8E1, 8E2	410, 426, 428
4.10.5 Inspection and Test Records	21.125, 21.303, 21.613		410, 516, 525, 405
4.10.6 First Article Inspection		10C2, 4Q1	619
4.11 Control of Inspection, Measuring and Test Equipment			
4.11.1 General		7Q9, 7Q10, 3AE5, 3BE4, 5Q1, 7P1, 7E1, 7S1	
4.11.2 Control Procedures		4P6, 3AP1, 3AE6, 4Q1, 4Q12, 7Q5, 7P1, 7Q7, 7Q2, 7Q3, 7Q1, 7Q4, 7Q6, 7Q8, 7Q9, 7Q10, 7Q11, 7Q12, 7Q13, 7Q14, 7Q15, 7Q16, 7Q18, 7Q19, 8E2, 5Q1	Sections 5B & 5D, 407
4.12 Inspection and Test Status			
4.12.1 Authorized Personnel	21.143	4Q1, 4Q2, 4Q5, 10C1	105, 408
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AS-9100 Elements	FAR	Current ACSEP Criteria	Phase II
4.13 Control of Nonconforming Product			
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4.13.2 Review and Disposition of nonconforming product	21.125, 21.143, 21.303, 21.607	11Q1, 11Q2, 11Q4, 11Q6, 11Q7, 11S1, 11E1, 10Q11, 6Q11, 7Q18	211
4.13.2.1 Material Review Authority	21.125, 21.143	11Q3, 11Q4, 11Q5	212, 213, 214
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4.13.2.3 Scrap Material			212
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4.14.2 Corrective Action		11Q6, 11Q7	114, 115, 522
4.14.3 Preventive Action			112
4.15 Handling, Storage, Packaging, Preservation and Delivery			
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4.15.2 Handling	21.125, 21.303, 21.125	10Q11, 12Q1, 12Q4	Section 4C
4.15.3 Storage	21.125, 21.303, 21.125	4P9, 12Q5, 12E1, 12P1, 12Q3, 12Q7, 12Q1	Section 4C
4.15.4 Packaging		4Q6	Section 4C
4.15.5 Preservation	21.125, 21.303,	12Q1	Section 4C
4.15.6 Delivery		12Q6, 12Q8, 16Q5	Section 4C
4.16 Control of Quality Records	21.125, 21.303, 21.613	5Q4, 8Q3, 9Q9, 1Q6, 2E2, 2E6, 1Q7, 2E9, 3AE4, 3AE5, 3AQ1, 3BE4, 4Q1, 4P4, 4Q5, 4Q12, 6Q9, 7Q12, 8E2, 10Q2, 10Q12, 11Q4, 12P1, 13P2, 13Q1, 13Q2, 13C1, 14S2, 14C1, 14C2, 15M2, 15M1, 16Q1, 16Q5, 17Q5, 17Q6,	107, 108, 117, 204, 209, 302, 308, 313, 401, 410, 414, 430, 429, 436, 508, 546, 525, 602, 706
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