

J.H. BUSCHER, INC.

Standard Specification SS00Z

TRAINING

Revision A
April 20, 2015

**NOTE: REVISIONS TO THIS DOCUMENT MAY REQUIRE SUBMITTAL TO THE
FEDERAL AVIATION ADMINISTRATION CERTIFICATE HOLDING DISTRICT OFFICE:
SEE PARAGRAPH 1.3**

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<i>Section</i>	<i>Description</i>	<i>Revision</i>	<i>Page</i>
1	General Notes	A	3
2	Documents	A	3
3	Operational and Policy Training	A	4
4	Technical Training	A	4
5	Levels of Training	A	6
6	FAA Repair Station Training	A	7
7	Records	A	7
8	Evaluation	A	7

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REVISION STATUS and CONTENTS

<i>Revision</i>	<i>Date</i>	<i>Eng</i>	<i>Quality</i>	<i>FAA</i>
~	Jan 20, 1999	JB	KR	
A	April 20, 2015	KR	KR	
B	August 12, 2015	KR	JB	

Revision B, August 12, 2015

Reason for Change: 1) FAA Request. 2) Elaboration needed in Evaluation Section.

Description of Change: Added 8 d, Identifying Needs and Deficiencies. Added explanatory notes to 8a through c.

1) GENERAL

1.1) Scope

The purpose of this specification is to:

- a. Establish quality training criteria and standards for all personnel at J.H. Buscher, Inc.
- b. Define training record control and responsibilities.
- c. Be used in conjunction with AS 9100, Section 6.2.2.
- d. Meet the training requirements of Code of Federal Regulations (CFR) 145.151, 145.153, 145.157, 145.163 and 145.165 for FAA Repair Stations.

1.2) Exclusions

This specification is not:

- a. A step-by-step training guide for specific positions.
- b. A technical procedure or authoritative document for control of any manufacturing or engineering task or process.
- c. Intended to override technical training documentation.
- d. Intended to list all necessary manufacturing skills.
- e. Intended for mandatory use by subcontractors.

1.3) Revisions to this Document

Any revisions to this document involving Section 6, FAA Repair Station Training, require submittal to the Certificate Holding District Office (CHDO) in Rochester, NY. In all other respects, revisions are covered by JHBI Standard Specification SS005, *Revisions and Document Change Notices*. The prospective revision, labeled "PRELIMINARY" is to be provided in .pdf form. The document may be submitted electronically.

2) DOCUMENTS

Reference documents are shown in Table 1. The latest revision of any document is to be used unless otherwise specified.

<i>Document</i>	<i>Title</i>	<i>Published By</i>
Part 145	Repair Stations	Federal Aviation Administration
Part 65	Certification of Airmen other than Flight Crew Members	Federal Aviation Administration
FAA Order 8130.21	Procedures for Completion and Use of the Authorized Released Certificate 8130-3	Federal Aviation Administration
AC 145-10	Advisory Circular, Repair Station Training Program	Federal Aviation Administration
ER001	Roster of Key Personnel	J.H. Buscher, Inc.
SS00Q	Quality Manual	J.H. Buscher, Inc.
SS00V	General Inspection Requirements	J.H. Buscher, Inc.
SS005	Revisions and Document Change Notices	J.H. Buscher, Inc.
SS01J	FAA Repair Station Manual	J.H. Buscher, Inc.

TABLE 1, Reference Documents

3) OPERATIONAL AND POLICY TRAINING

The following Quality policy training is required by position:

3.1) Management

All senior management personnel – this includes the President and all departmental managers – are expected to understand all the requirements of this document, JHBI Standard Specification SS00Q, *Quality Manual*, the applicable sections of AS9100 and JHBI Standard Specification SS01J, *FAA Repair Station and Quality Control Manual*. All persons in management must be able to educate their employees in – and serve as a reference for – applicable Quality requirements. Although it is not necessary to have a comprehensive knowledge of every specification provision, each manager must have ready access to controlling documents, and must understand the mandates relating to their respective disciplines.

3.1.1) Responsibility for Management Training

The President is to assign responsibility for assessing management training needs. If necessary, trainer(s) may be other senior managers or outside consultants.

3.2) Quality Policy Training for All Employees

Quality is the responsibility of everybody. All managers and supervisors must provide personnel with all means available to ensure quality. General Quality training for employees will address the following:

- a. What is the AS9100 series standard?
- b. Why this Quality system, and what is needed for AS9100 registration?
- c. Basic understanding of the FAA Repair Station and why this is necessary.
- d. General structure of the internal JHBI Quality system.
- e. Understanding the role of a Quality Department and System in the corporate operation and structure, the difference between administration and responsibility.
- f. Understanding their individual Quality responsibilities.
- g. Understanding general customer Quality requirements in the aerospace component industry.

3.2.1) Responsibility for Personnel Quality Policy Training

Departmental Managers are responsible for ensuring personnel of their respective departments understand the above requirements by either training or experience.

4) TECHNICAL TRAINING

All personnel must have access to whatever resources or information necessary to do the job. Refer to Table 2 for the basic training requirements by department. It is recognized that responsibilities within positions and departments overlap. Requirements are the same regardless of position within the department. Table 2 lists types of training for the following core job categories:

- a. **Assembly**
Putting together a product using basic hand tools and occasionally specialized tools, gages and fixtures.
- b. **Test**
Setting up products, adjustment to customer specifications, acceptance testing – including functional and electrical tests, evaluation of returned product.
- c. **Inspection**
Performs any category of product assurance at any stage: dimensional, electrical, functional or any qualitative or quantitative property. May involve recording of measured data.
- d. **Machine Shop**
Fabricates and dimensionally inspect components to prints. Ensures material provenance. May perform mate-fits between components.

<i>Training Category</i>	<i>Department</i>			
	<i>Assembly</i>	<i>Test</i>	<i>Inspection</i>	<i>Machine Shop</i>
Basic Metrology			X	X
Basic Electrical Testing	X	X		
Transducer Basics & Calibration, Data Acquisition Testing		X		
Inspection Records	X	X	X	X
Gage Calibration			X	X
General Assembly Practice	X	X		
Product Knowledge	X	X	X	X
Simple Statistics and Error Sources		X	X	

TABLE 2, Training Requirements by Position

4.1) Training Category Descriptions

- a. **Basic Metrology**
Use of simple dimensional inspection tools, geometric and positional tolerance, inspection record keeping, material inspection.
- b. **Basic Electrical Testing**
Coil resistance, insulation resistance, bonding resistance, dielectric strength, resistance correction for temperature.
- c. **Transducer Basics & Calibration, Data Acquisition Testing**
Operation of computer test programs, including saving data, use as a setup tool, interpreting results, installing and calibrating transducers.
- d. **Inspection Records**
Archiving of product and component inspection records, including customer and supplier data.
- e. **Gage Calibration**
NIST traceable calibration, traceability, interval and accuracy of simple dimensional gages. Use of “Calibrate each use” tools.

f. **General Assembly Practices**

Cleanliness practices, fastener torquing, interference-fits, documentation practices, permanent magnet charging and degaussing.

g. **Product Knowledge**

Magnetic, electromagnetic, hydraulic and pneumatic fundamentals. Basics of torque motor operation, types of valves and typical applications.

h. **Simple Statistics and Error Sources**

Understanding Type I vs. Type II errors and product acceptance defaults. Normal distributions, standard deviations and means. Sources of error, including human.

4.2) Technical Training Exemptions

If, in the judgment of either the General Manager or the applicable departmental manager, an employee demonstrates adequate proficiency in the required discipline from either previous employment, experience or education, the job specific technical training requirements may be waived.

4.3) Responsibility for Technical Training

The President or General Manager is to assign responsibility for training employees. The trainer(s) may be departmental managers, persons with demonstrated experience and expertise in the relevant discipline or outside consultants. New hires are to be given training or deemed exempt within 6 months of starting date.

4.4) Additional Requirements

Beyond what is listed herein, management and departmental supervisors may from time to time establish additional training standards as required.

5) LEVELS OF TRAINING

The level of training is distinct from the type (Operational or Technical) or category, and depends on the individual employee status. There are four core levels:

a. **Initial**

Training given to new hires. This will be the Operational and Policy Training described in Section 3, as well as Job-specific technical training deemed necessary by the President, General Manager, or Departmental Managers.

b. **Ongoing**

Recurring Job-Specific training, as required. The need for ongoing training will be assessed by the President, General Manager, and Departmental Managers.

c. **Specialized**

This may be unique to a particular component, product or customer. The need for specialized training will be assessed by the President, General Manager, and Project Engineers or Program Managers.

d. **Remedial**

Training of any type, when an individual requires reminders and fresh instruction. The need for remedial training will be assessed by the President, General Manager, and Departmental Managers.

6) FAA REPAIR STATION TRAINING

Operations specific to operating a Repair Station under Federal Aviation Administration CFR Part 145 are covered by JHBI Standard Specification SS01J, *FAA Repair Station and Quality Control Manual*.

6.1) Air Carrier Operations

JHBI does not perform job functions listed in CFR 121 or 135 for or on behalf of the part 121 or 135 operators including loading of items for transport on an aircraft.

6.2) Hazardous Materials

JHBI is not a hazmat employer under as defined by 49 CFR 171.8, and does not require a hazardous materials training program that meets the training requirements of 49 CFR part 172 subpart H.

7) RECORDS OF TRAINING

The Quality Manager is responsible for maintaining records of training. The format is optional, but must contain the date(s), employees, nature of the training, instructor, or justification for exemption (e.g. experience, previous employment).

7.1) Duration of Record

Records are to be maintained a minimum of three year from the date of training for all employees, even those no longer with the company.

8) EVALUATION

At a minimum, an assessment of employee training needs for each department must be conducted annually by President, General Manger, and departmental supervisors. The Quality Manager is responsible for maintaining records of evaluations. The results of the evaluations will be recorded. The following is to be evaluated:

- a. **Effectiveness of Training** *How well did the training work? Was the training material retained and applied?*
- b. **Scope of Training** *Is the training relevant to the employees activity or product knowledge? Is it deficient or superfluous in any area?*
- c. **Materials and Resources** *Are the resources adequate to educate employees in the desired areas? Are customer, vendor or third-party training resources available?*
- d. **Identifying Needs and Deficiencies** *What are the area of potential improvement, based on: the assessment of a through c above, FAA or other external agency determination, quality audits, external or internal corrective action investigations, employee suggestions? Is need limited to individual(s), department or is it organization-wide?*