

Connectors, Receptacle, External Electric Power, Aircraft
General Specification For

FSC 59353

This amendment forms a part of AS81790, dated 2002-03

1. Present Requirement: 4.4 Qualification inspection (Page 8)

As shown

Change Requirement: 4.4 Qualification inspection (Page 8):

Qualification inspection shall be in accordance with Table I and II. Sequential testing is not required except as specified. A request for qualification shall be made to the qualifying activity prior to initiating testing. Testing cannot begin until the supplier has received an authorization letter. The supplier is recommended to provide the qualifying activity a test plan based on the authorization letter to ensure the supplier and qualifying activity maintain communication and document changes as needed. The qualifying activity has the authority to modify the specification test requirements to resolve test failures/discrepancies and to waive testing to verify specific product manufacturing changes or qualifications by similarity. For each component tested the supplier shall use the same materials, manufacturing procedures, and methods of inspection as would be used to provide the component to a purchaser. Any change in the supplier's process control inspections, quality conformance inspections, or manufacturing control drawings (editorial changes are acceptable) without the express approval of the qualifying activity may result in loss of qualification for that product. The qualifying activity shall perform the tests specified in Table I and supplier shall perform the tests specified in Table II in a laboratory of their choice. All test laboratories requires qualifying activity approval.

Rationale for Change: Add qualifying activity test requirements.

2. Present Requirement: 4.1.1 Qualification authorization (Page 9)

As shown

Change Requirement: 4.1.1 Qualification authorization (Page 9)

4.1.1 Initial Qualification Test Report: The supplier shall furnish the qualifying activity one certified test report containing the following information:

- a. The quantitative results for tests specified in Table II and the authorization letter. Upon request from the supplier, the qualifying activity will provide certified Table I test results for the test report.
- b. Material and detail specification certifications.
- c. A summary of the results of the quality conformance tests in Table III indicating as a minimum, the number of lots which passed and the number which failed.

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Rationale for Change: Add qualifying activity test requirements.

3. Present Requirement: 4.4.2 Test Samples, first and second sentences (Page 9)

The test sample size shall be two specimens of each type component being qualified. An additional two specimens may be used for fungus resistance testing if required.

Change Requirement: 4.4.2 Test Samples, first and second sentences (Page 9)

The test sample size shall be as specified in Table I and Table II.

Rationale for Change: Add qualifying activity test requirements.

4. Present Requirement: 4.5.3 Periodic qualification inspection (Page 9)

As shown

Change Requirement: 4.5.3 Periodic qualification inspection (Page 9)

4.5.3 Periodic qualification: Periodic qualification is required at 36 month intervals. Testing cannot begin until the supplier receive an authorization letter to begin testing. The qualifying activity is authorized to established an alternate due date to accomindate testing schedules. The qualifying activity shall perform the Table I tests and provide certified data to the supplier upon request. Failure to submit to periodic qualification shall result in loss of qualification for that product. The supplier shall provide a qualification test report and two untested specimens of each approved connector type.

4.5.4 Periodic Qualification test report: The supplier shall furnish the qualifying activity one certified test report containing the following information:

- a. Upon request from the supplier, the qualifying activity will provide certified Table I test results for the test report.
- b. Material and detail specification certifications.
- c. A summary of the results of the quality conformance tests in Table III indicating as a minimum, the number of lots which passed and the number which failed, including the corrective actions perform during the retention period.

Rationale for Change: Add qualifying activity test requirements.

5. Present Requirement: Table I Applicable qualification inspections (Page 10)

As shown

Change Requirement: Table I Applicable qualification inspections (Page 10)

TABLE I - QUALIFYING ACTIVITY TEST REQUIREMENTS

Connector Only Examination or Test	Requirement Paragraph	Examination or Test Paragraph	Number of Samples
Examination of product	3.1-3.4, 3.7, 3.8	4.6.1	2
Material certifications	3.3	4.6.9	
Dimensions	3.4.3	4.6.2	
Thermal shock	3.6.1	4.6.12	
Humidity resistance	3.6.3	4.6.13	
Salt spray	3.6.2	4.6.14	
Terminal torque strength ^{1/}	3.5.2	4.6.5	
Hardness of contacts	3.4.1.7	4.6.16	
Contact plating thickness	3.3.3	4.6.10	

^{1/} Shield assembly required

TABLE II – SUPPLIER TEST REQUIREMENTS

Connector, Shield and Cover Examination or Test	Requirement Paragraph	Examination or Test Paragraph	Number of Samples
Examination of product	3.1-3.4, 3.7, 3.8	4.6.1	2
Material certifications	3.3	4.6.9	
Dimensions	3.4.3	4.6.2	
Pin impact strength	3.5.1	4.6.4.1	
Shield impact strength	3.5.1	4.6.4.2	
Cover impact strength	3.5.1	4.6.4.3	
Shield attachment and static strength	3.5.5	4.6.8	
Pin static bending strength	3.5.4	4.6.7	
Flexural strength	3.6.3	4.6.6	

Rationale for Change: Add qualifying activity test requirements.

6. Present Requirement: Tables II and III and references to them (Page 11).

As shown

Change Requirement: Tables II and III and references to them (Page 11).

Change Table II to Table II and Table III to Table IV and all reference to them.

Rationale for Change: Add qualifying activity test requirements

7. Present Requirement: 6.3 Qualification, Page 52, as changed by Amendment 2 (September 2007)

With respect to products requiring qualification by the government, awards will be made only for products, which are at the time set for opening of bids, qualified for inclusion in the applicable Qualified Products List (QPL), whether such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers (suppliers) are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts for the products delineated in this specification. Qualification is required for U.S. Government procurement. The qualifying activity, for U.S. Department of Defense procurement purposes, is the Naval Air Systems Command (Code 4.4.5.3), 22229 Elmer Road, Bldg. 2360, Room 107, Patuxent River, MD 20670. Application for qualification tests shall be made in accordance with provisions governing qualification in SD-6. Unless otherwise specified by contract, commercial procurement of these products shall meet these requirements.

Change requirement: 6.3 Qualification, Page 52

With respect to products requiring qualification by the government, awards will be made only for products, which are at the time set for opening of bids, qualified for inclusion in the applicable Qualified Products List (QPL), whether such products have actually been so listed by that date. The qualifying activity will provide a summarized list of all qualified sources on a public accessible electronic site (<http://www.navair.navy.mil/qpl/>). The summary shall include but is not limited to the supplier approved part number and related specification part number, a dedicated approval reference number, a supplier location where purchases maybe requested and the manufacturing location of the component. The attention of the contractors is called to these requirements, and manufacturers (suppliers) are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts for the products delineated in this specification. Qualification is required for U.S. Government procurement. The qualifying activity, for U.S. Department of Defense procurement purposes, is the Naval Air Systems Command (Code 4.4.5.3), 22229 Elmer Road, Bldg. 2360, Room 107, Patuxent River, MD 20670. Application for qualification tests shall be made in accordance with provisions governing qualification in SD-6. Unless otherwise specified by contract, commercial procurement of these products shall meet these requirements.

Rationale change: to note the qualifying activity practice and responsibility to provide a public list of qualified sources (editorial action)

Amendment 2: September 2007

1. Present Requirement: 6.3 Qualification, Page 52

With respect to products requiring qualification, awards will be made only for products which are at the time set for opening of bids, qualified for inclusion in applicable qualified products list (QPL) whether or not such products have actually been so listed by that date. The attention of the manufacturers is called to this requirement, and they are urged to arrange to have products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to the qualification of products may be obtained from the Naval Air Warfare Center Aircraft Division Patuxent River, Code 4.4.4, Building 1461, 48256 Shaw Road, Unit 4, Patuxent River, MD 20670.

Change Requirement: 6.3 Qualification, Page 52

With respect to products requiring qualification by the government, awards will be made only for products, which are at the time set for opening of bids, qualified for inclusion in the applicable Qualified Products List (QPL), whether such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers (suppliers) are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts for the products delineated in this specification. Qualification is required for U.S. Government procurement. The qualifying activity, for U.S. Department of Defense procurement purposes, is the Naval Air Systems Command (Code 4.4.5.3), 22229 Elmer Road, Bldg. 2360, Room 107, Patuxent River, MD 20670. Application for qualification tests shall be made in accordance with provisions governing qualification in SD-6. Unless otherwise specified by contract, commercial procurement of these products shall meet these requirements.