NASM1312-24
29 August 1997

ADOPTION NOTICE

NASM1312-24, "Fastener Test Methods Method 24 Recptacle Torque Out Panel Fasteners" was adopted on 29 August 1997 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Commander, Naval Air Warfare Center Aircraft Division, Code 414100B120-3 Highway 547, Lakehurst, NJ 08733-5100. DoD activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the Aerospace Industries Association, 1250 Eye Street NW, Washington, DC 20005.

NASM1312-24 Should be used instead of MIL-STD-1312-24, which was cancelled on 29 August 1997.

Custodians:
Army - AV
Navy - AS
Air Force - 11

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NATIONAL AEROSPACE STANDARD

NASM1312-24
STANDARD PRACTICE

FASTENER TEST METHODS

METHOD 24

RECEPTACLE TORQUE-OUT,

PANEL FASTENERS

Aerospace Industries Association

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MIL-STD-1312-24

DESIGNATION FOR THIS TEST METHOD REMAINS MIL-STD-1312-24

LIST OF CURRENT SHEETS									
NO.	1	2	3	4	5	6			
REV.	NEW	NEW	NEW	NEW	NEW	NEW			

FSC 53GP

APPROVAL DATE AUGUST 1997

NATIONAL AEROSPACE STANDARD

FOREWORD

This standard sets forth a standard test procedure for determining the torque-out capabilities of receptacle assemblies of structural panel fasteners.

APPROVAL DATE AUGUST 1997

NATIONAL AEROSPACE STANDARD

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1 SCOPE

1.1 Applicability. This test method covers the procedure and apparatus required for testing the torque-out capability of receptacle assembly of structural panel fasteners.

2. REFERENCED DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards and handbooks. Unless otherwise specified, the following specifications, standards and handbooks of the issue listed in the current Department of Defense Index of Specifications and Standards (DoDISS) and the supplement thereto (if applicable), form a part of this standard to the extent specified herein.

STANDARDS

FEDERAL

GGG-W-686 Wrench, Torque

MILITARY

MS20426 Rivet, Solid, Countersunk 100 Degrees, Precision Head, Aluminum and Aluminum Alloy

(Copies of specifications, standards, handbooks, drawings and publications required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

3. DEFINITIONS Not applicable.

4. GENERAL REQUIREMENTS

4.1 Test apparatus.

4.1.1 Torque-out. Torque applied to the receptacle should be measured with a torque indicating wrench calibrated for accuracy within the limits specified by GGG-W-686. The wrench scale should be selected so that the anticipated loading is within the middle of the scale.

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5. DETAIL REQUIREMENTS

5.1 Test procedure.

5.1.1 Torque-out test. Unless otherwise specified, mount receptacle assembly on rigid test plate using MS20426 AD rivets. Apply torque to the receptacle by means of a stud sufficiently long to avoid any clamping loading. Use torque measuring device to record test load in a clockwise direction. When subjected to required minimum values, there shall be no failure or permanent deformation visible to the unaided eye to any of the receptacle components. Failure of the attaching rivets or other specified fastener is not to be interpreted as a failure of the receptacle.

6. NOTES

6.1 Test report. The test report shall include the following data:

a. Fastener description.

(1) Part number

(2) Lot identification

(3) Material

(4) Heat treat

(5) Grip length

(6) Mating part

(7) Measured fastener diameter

b. Test machine

(1) Model and serial number

(2) Calibration date

c. Ultimate load

d. Installation procedure

e. Test load and load rate

f. Type of failure

g. Method of support

h. Date of test

i. Test performed by