NOTE: The document identifier and heading has been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

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18 September 1992
SUPERSEDING
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22 August 1983

PERFORMANCE SPECIFICATION

SQUIB, MARK 1 MOD 0 FOR 2.75 INCH ROCKET

This specification is approved for use by the U.S. Army Missile Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the quality assurance provisions, and special requirements not covered by the drawings, for parts for one type of squib designated Mark 1 Mod 0.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

Beneficial comments (recommendation, additions, deletion) and any pertinent data which may be of use in improving this doument should be addressed to: Commander, US Army Missile Command, ATTN: AMSMI-RD-SE-TD-ST, Redstone Arsenal, AL 35898-5270 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 1340
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

Federal

PPP-B-601	-	Boxes, Wood, Cleated-Plywood
PPP-B-621	-	Boxes, Wood, Nailed and Lock-Corner
PPP-B-636	-	Boxes, Shipping, Fiberboard

Military

MIL-A-2550	-	Ammunition, General Specification for

STANDARDS

Military

MIL-STD-129	-	Marking for Shipment and Storage
MIL-STD-331	-	Fuze and Fuze Components, Environmental and Performance Tests for
MIL-STD-414	-	Sampling Procedures and Tables for Inspection by Variables for Percent Defective
MIL-STD-1168	-	Ammunition Lot Numbering
MIL-STD-1169	-	Packaging, Packing and Marking for Shipment of Inert Ammunition Components

(Unless otherwise indicated, copies of the federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Bldg. 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

Army (MICOM)

13372506	-	Squib MK 1 MOD 0 Assembly
13372508	-	Case
13372511	-	Spacer
13372512	-	Initiation Sub-Assembly
13372514	-	Bridge Wire Sub-Assembly
13372516	-	Plug

PUBLICATIONS

49CFR71-78 - Code of Federal Regulations

(Copies of the 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 activity.)

2.2 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.4.

3.2 Material. Materials shall be in accordance with drawings and specifications specified herein.

3.3 Electrical continuity and resistance. The electrical circuit of each squib shall be continuous and shall meet the requirements of drawing 13372506.

3.4 Dielectric characteristics. The resistance between the connected lead wires and the case shall be not less than 50 megohms.

3.5 No-fire sensitivity. The squib shall not fire when energized with 0.20 amperes, 24 volts direct current (dc) for not greater than five seconds.

3.6 Firing time. When subjected to 1.5 + 0.15 amperes dc at 21.1 ± 2.8° Celsius (C), the squib shall fire in 0.005 seconds or less and produce 298 ± 78 pound force per square inch (lbf/in^2).

3.7 Pull test. The plug subassembly (drawing 13372516) shall be of such quality as to withstand a ten pound (lb.) pull test on the individual leads.

3.8 Load test. The bridge wire subassembly (drawing 13372514) shall have a sound electrical and mechanical joint that will not break when subjected to a 25 gram load test.

3.9 Output limits. A closed bomb test will be developed to measure the output limits (see 4.10.7).

3.10 Jolt resistance. The squib shall withstand the jolt test as specified in 4.10.8.1. Thereafter, it shall meet the requirements of 3.3 and 3.4 and shall fire in accordance with 4.10.4 in 0.003 seconds or less.

3.11 Vibration resistance. The squib shall withstand the vibration test as specified in 4.10.8.2. Thereafter, it shall mee the requirements of 3.3 and 3.4 and shall fire in accordance with 4.10.4 in 0.003 seconds or less.

3.12 Watertightness. The squib shall be watertight and shall show no evidence of leakage when tested as specified in 4.10.8.3 and thereafter shall fire in accordance with 4.10.4 in 0.005 seconds or less.

3.13 Workmanship. All parts shall be fabricated and finished in a thorough, workmanlike manner. They shall be free of burrs, chips, sharp edges, cracks, unblended radii, surface defects, metal shavings, dirt, grease, rust, corrosion products and other foreign matter. The cleaning method used shall not be injurious to any part nor shall the parts be contaminated by the cleaning agent. All required markings shall be neat and sharply defined. Known item defects shall not be submitted with the lot.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use

his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements. The provisions of MIL-A-2550 shall apply.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.4)
b. Quality conformance inspection (see 4.5).

4.3 Inspection conditions. Unless otherwise specified, all inspections shall be performed in accordance with 4.7.2.

4.4 First article inspection.

4.4.1 First article sample. The contractor shall submit a first article sample as designated by the contracting officer for evaluation in accordance with the provisions of 4.4.2. The first article sample shall consist of 1000 assemblies and 50 complete sets of parts (i.e., 50 each of every component, and every subassembly) which have been produced by the contractor or furnished by a supplier and which have been manufactured using the same production processes, procedures and equipment which will be used in fulfilling the contract. All parts and materials, including packaging and packing, shall be obtained from the same source of supply as will be used in regular production. Prior to submission, the contractor shall inspect the sample to the degree necessary to assure that it conforms to the requirements of the contract and submit a record of this inspection with the sample,

including statements of findings/certificates of conformance for materials, (see 4.6.c.). A sample containing known defects will not be submitted unless specifically authorized, by the contracting officer. A first article, or portion thereof, as directed by the contracting officer, shall also be submitted whenever there is a lapse in production for a period greater than 90 days or whenever a change occurs in manufacturing process, material used, drawing or specification such as to significantly affect product uniformity as determined by the Government.

4.4.2 Inspections to be performed. Assemblies and components will be subjected by the Government to any or all of the examinations or tests specified in this specification and any or all requirements of the applicable drawings (see figure 1).

4.4.2.1 Sample. Fifty percent of the squibs for the first article testing shall demonstrate operability when tested at -53.9 ± 2.8°C and the remaining 50 percent when tested at 73.9 ± 2.8°C.

4.4.3 Rejection. If any assembly or component fails to comply with any of the requirements, the first article sample shall be rejected. The Government reserves the right to terminate its inspection upon any failure of any assembly or component to comply with any of the stated requirements.

4.5 Quality conformance inspection. Quality conformance inspections shall be as specified in table I, the applicable drawings as specified herein, and as specified by the contracting officer (see 6.2).

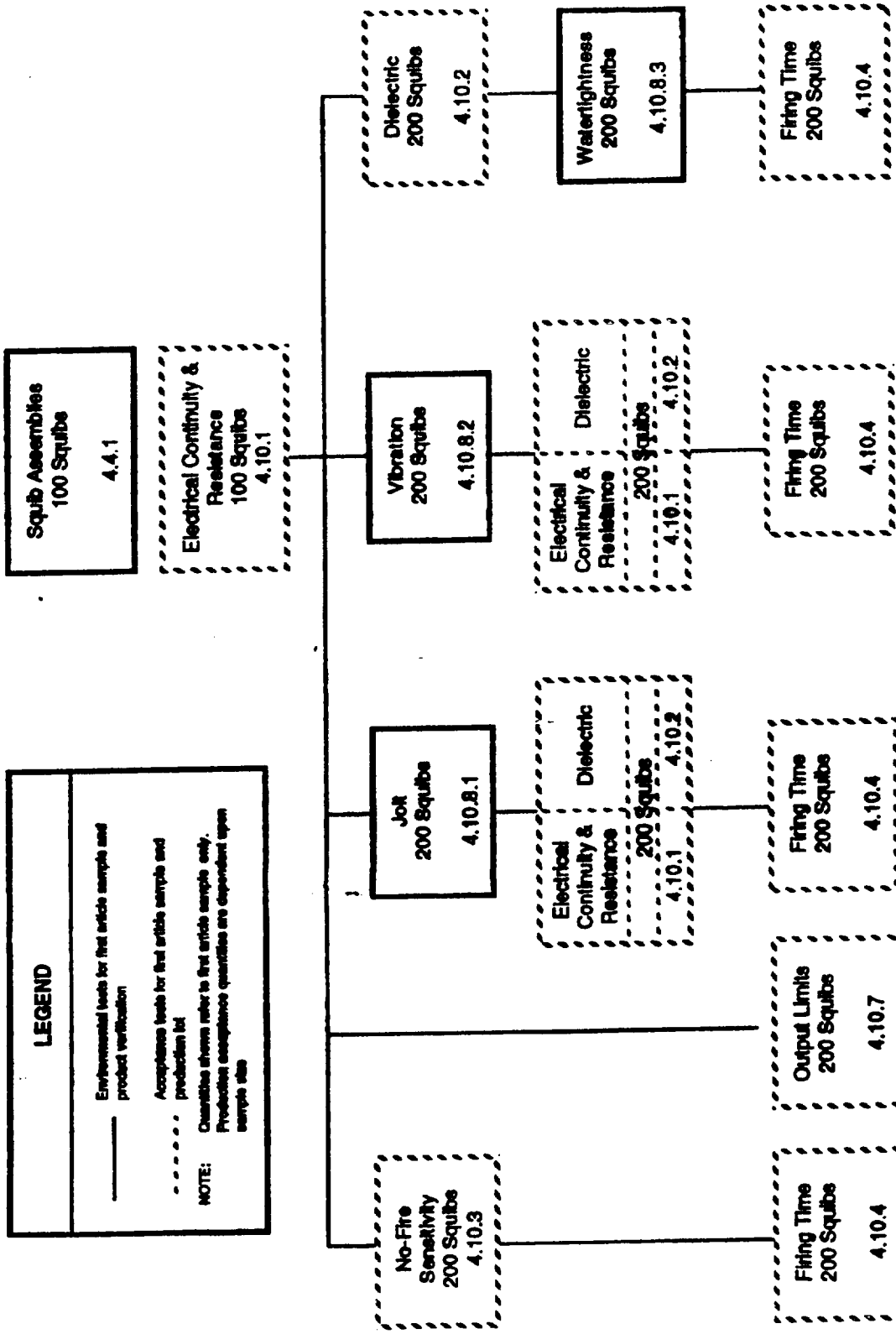

FIGURE 1. Test Sequence.

TABLE I. Quality conformance inspection.

Inspection	Requirement paragraph	Test paragraph
Material	3.2	4.6
Electrical continuity and resistance	3.3	4.9.1
Dielectric characteristics	3.4	4.9.2
No-fire sensitivity	3.5	4.9.3
Firing time	3.6	4.9.4
Pull test	3.7	4.9.5
Load test	3.8	4.9.6
Output limits	3.9	4.9.7
Jolt resistance	3.10	4.9.8.1
Vibration resistance	3.11	4.9.8.2
Watertightness	3.12	4.9.8.3

4.6. Submission of product. At the time each completed lot of items deliverable under the contract is submitted to the Government for acceptance, the contractor shall supply the following information accompanied by a certificate which attests that the information provided is correct and applicable to the product being submitted:

a. A statement that the lot complies with all of the quality assurance provisions specified in this specification.

b. Drawing and specification number and date, together with identification and date of changes thereto.

c. A statement that all material purchased by the contractor meets requirements, when such material is controlled by Government or commercial specifications referenced in any of the

contractual documents, and that certificates of conformance are on file and available for review.

d. Number of items in the lot.

e. Date submitted.

The certificate shall be signed by a responsible agent of the certifying organization. The initial certificate submitted shall be substantiated by evidence of the agent's authority to bind his principal. Substantiation of the agent's authority will not be required with subsequent certificates unless, during the course of the contract, this authority is vested in another agent of the certifying organization.

4.7 Inspection provisions for production.

4.7.1 Lot formation. In this specification the term inspection lot is an essentially homogeneous collection of units or product from which a representative sample is drawn and inspected to determine conformance of the lot with applicable requirements. The sample selected shall represent only that quantity of units from which the sample was drawn and shall not be construed to represent any prior or subsequent quantities presented for inspection. Homogeneity shall be considered to exist provided the lot has been produced by one manufacturer, in one unchanged process, in accordance with the same drawing, specifications, or revision thereof. Changes to either the process, specification or drawing not affecting safety, performance, interchangeability, or storage, as determined by the Government inspector, shall not be deemed to alter the homogeneity of the lot. Inspection lots shall be numbered in accordance with MIL-STD-1168. Unless otherwise approved by the contracting officer, the inspection lot size of major assemblies or end items deliverable under the contract shall not be less than the smallest estimate of quantities contractually scheduled for production during the contract period nor more than the largest quantity contractually scheduled for delivery during any month of the contract period. Inspection lots for components or sub-assemblies, other than the items of delivery shall be homogeneous and of a size convenient to the contractor.

4.7.2 Examination. The examinations specified herein shall be performed on inspection lots (see 4.7.1) of the components or subassemblies in the applicable paragraph headings. Inspection for critical defect (and major defects when so specified) shall be 100 percent.

a. Sampling Plans. Sampling plans shall be in accordance with tables II thru VIII of this specification. Sampling plans for major defects shall be in accordance with sampling plans specified herein, except that variable sampling plans in accordance with MIL-STD-414 may be used if requested by the contractor and approved by the contracting officer.

b. Critical Defects. Unless otherwise specified, inspection for critical defects shall be 100 percent.

c. Major Defects. When required, major defects shall be inspected 100 percent. Except where 100 percent inspection is specified, inspection for major defects shall be to the individual sampling plan tables indicated in the classification of defects and test paragraphs provided in this detail specification. The sampling plans for testing (see 4.9) shall be as specified.

d. Unlisted Defects. See MIL-A-2550.

e. Individual Defects. Instead of applying the sampling plans designated herein to the individual defects, the group sampling plans listed for each major subparagraph in 4.7.2 may be used at the option of the contractor for those groups where a group sampling plan is assigned. Each group sampling plan applies to a major group indicated in the subparagraphs of paragraph 4.7.2, and if this method is elected, it shall be used for all of the subparagraphs of paragraph 4.7.2, where group sampling plans are so designated for this purpose.

TABLE II. Sampling plan I.

Lot Size	Sample Size
2 to 13	All
14 to 150	13
151 to 280	20
281 to 500	29
501 to 1200	34
1201 to 3200	42
3201 to 10,000	50
10,001 to 35,000	60
35,001 to 150,000	74
150,001 to 500,000	90
500,001 and over	102
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE III. Sampling plan II.

Lot Size	Sample Size
2 to 20	All
21 to 280	20
281 to 1200	47
1201 to 3200	53
3201 to 10,000	68
10,001 to 35,000	77
35,001 to 150,000	96
150,001 to 500,000	119
500,001 and over	143
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE IV. Sampling plan III.

Lot Size	Sample Size
2 to 8	All
9 to 90	8
91 to 150	12
151 to 280	19
281 to 500	21
501 to 1200	27
1201 to 3200	35
3201 to 10,000	38
10,001 to 35,000	46
35,001 to 150,000	56
150,001 and over	64
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE V. Sampling Plan IV.

Lot Size	Sample Size
2 to 80	All
81 to 1200	80
1201 to 3200	120
3201 to 35,000	189
35,001 to 150,000	218
150,001 to 500,000	270
500,001 and over	303
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE VI. Sampling plan V.

Lot Size	Sample Size
2 to 200	All
201 to 10,000	200
10,001 to 35,000	300
35,001 to 500,000	476
500,001 and over	556
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE VII. Sampling plan VI.

Lot Size	Sample Size
2 to 125	All
126 to 3200	125
3201 to 10,000	192
10,001 to 35,000	294
35,001 to 150,000	294
150,001 to 500,000	345
500,001 and over	435
In all cases: Acceptance number is ZERO Rejection number is ONE	

TABLE VIII. Sampling plan VII.

Lot Size	Sample Size
2 to 800	All
801 to 500,000	800
500,001 and over	1200
In all cases: Acceptance number is ZERO Rejection number is ONE	

4.8 Classification of defects. Each sample shall be tested for defects as specified in 4.8.1 thru 4.8.5.

4.8.1 Squib MK 1 Mod 0, Assembly (see drawing 13372506).

TABLE IX. Classification of defects, squib MK 1 mod 0, assembly.

Categories	Defects	Method of inspection	Sampling plan (tables)
Critical:			
1.	Bottom of case deformed, split or cracked	Visual	All
2.	Lead wire ends not short circuited	Visual	All
Major:			
101.	Case crimp not continuous or not uniform	Visual	III
102.	Shellac finish incomplete	Visual	III
103.	Outside diameter nearest crimp	Gage	III
104.	Length of bare lead wire from insulation to shunting connector	Gage	III
105.	Length of exposed insulated lead	Gage	III
106.	Length forward end of case to base of booster charge subassembly	Gage	III
107.	Oil, grease or foreign material on subassemblies	Visual	III
108.	Electrical circuit and continuity test	Volt/ Ohmmeter	IV
109.	Dielectric test	Volt/ Ohmmeter	IV
110.	No-fire sensitivity test	Volt/ Ampmeter	V

TABLE IX. Classification of defects, squib MK 1 mod 0, assembly - continued.

111.	Firing time test	Volt/ Ampmeter	I
112.	Pull test	Gage	VI
113.	Load test	Scale	VII
114.	Output limits	Bomb test fixture	I

4.8.2 Plug subassembly (see drawing 13372516 covering a detail of drawing 13372506).

TABLE X. Classification of defects, plug subassembly.

Categories	Defects	Method of inspection	Sampling plan (tables)
Critical:	None defined		
Major:			
101.	Lead wire insulation charred or otherwise damaged	Visual	I
102.	Sprue cavity extends to bare lead wire or permits insulation to move away from plug	Visual	I

4.8.3 Initiation subassembly (see drawing 13372512 showing a detail of drawing 13372506).

TABLE XI. Classification of defects, initiation subassembly.

Categories	Defects	Method of inspection	Sampling plan (tables)
Critical:			
1.	Initiation bead contacts plug subassembly between terminals	Visual	All
Major:			
101.	Cellulose lacquer coating incomplete	Gage	II
102.	Initiation charge projects beyond the .192 diameter	Gage	II

4.8.4 Case (see drawing 13372508 showing a detail of drawing 13372506).

TABLE XII. Classification of defects, case.

Categories	Defects	Method of inspection	Sampling plan (tables)
Critical:	None defined		
Major:			
101.	Ledge on end of case	Visual	I
102.	Smallest diameter at open end	Gage	I
103.	Corner section less than .004 inches thick	Gage	I
104.	Thickness of side section	Gage	I

4.8.5 Spacer (see drawing 13372511 showing a detail of drawing 13372506).

TABLE XIII. Classification of defects, spacer.

Categories	Defects	Method of inspection	Sampling plan (tables)
Critical:	None defined.		
Major:			
101.	Inside diameter of spacer	Gage	II

4.9 Testing.

4.9.1 Electrical circuit and continuity test, major defect no. 108 table IX (see drawing 13372506). Each lot of squids shall be tested as specified in 4.10. The sampling plan for this test shall be in accordance with table V sampling plan IV. One defective item not meeting the requirements of 3.3 shall be cause for lot rejection.

4.9.2 Dielectric test, major defect no. 109 (see table IX). Using the acceptable samples from 4.9.1, test the squibs as specified in 4.10.2. The sampling plan for this test shall be in accordance with table V, sampling plan IV. One defective item not meeting the requirements of 3.4 shall be cause for lot rejection . This is considered a destructive test. Any item so tested shall not be returned to the lot.

4.9.3 No-fire sensitivity test, major defect no. 110 (see table IX). Each lot of squibs shall be tested as specified in 4.10.3. The sampling plan for this test shall be in accordance with table VI, sampling plan V. One defective sample failing the requirements of 3.5 shall be cause for rejection. This is considered to be a destructive test. Any item so tested shall not be returned to the lot.

4.9.4 Firing time test, major defect no. 111 (see table IX). Each lot of Squibs shall be tested as specified in 4.10.4. The sampling plan for this test shall be in accordance with table II, sampling plan I. If the sample fails the requirements of 3.6, or has one or more duds or misfires, the lot shall be rejected.

4.9.5 Pull test (see drawing 13372516) - major defect no. 112 (see table IX). Each lot of plug subassemblies shall be tested as specified in 4.10.5. The sampling plan for this test shall be in accordance with table VII, sampling plan VI. One defective sample failing the requirements of 3.7 shall be cause for lot rejection.

4.9.6 Load test (see drawing 13372514) - major defect no. 113 (see table IX). Each lot of bridge wire subassemblies shall be tested as specified in 4.10.6. The sampling plan for this test shall be in accordance with table VIII, sampling plan VII. One defective sample failing the requirements of 3.8 shall be cause for lot rejection.

4.9.7 Output limits test (see 3.9) - major defect no. 114 (see table IX). Each lot of squibs shall be tested as specified in 4.10.7. The sampling plan for this test shall be in accordance with table II, sampling plan I. If one sample fails the requirements of 3.9, the lot shall be rejected.

4.9.8 Special tests. The following tests are to be performed on the first article sample and on each rejected lot resubmitted for acceptance in addition to the normal acceptance tests. Information as to sample size and test sequence is given in figure 1.

4.9.8.1 Jolt test (see 3.10). The test sample shall be tested as specified in 4.10.8.1. Thereafter, the squibs shall meet the requirements of 3.10.

4.9.8.2 Vibration test (see 3.11). The test sample shall be tested as specified in 4.10.8.2. Thereafter, the squibs shall meet the requirements of 3.11.

4.9.8.3 Watertightness test (see 3.12). The test sample shall be tested as specified in 4.10.8.3. Thereafter, the squibs shall meet the requirements of 3.12.

4.10 Test methods and procedures.

4.10.1 Electrical circuit and continuity test (see 4.9.1). The electrical circuit of the squib between the lead wires shall be continuous and shall be within the resistance limits of 0.7 to 1.3 ohms inclusive. The equipment used in measuring the igniter electrical continuity and resistance shall not subject the squib firing circuit to more than 25 milliamperes.

4.10.2 Dielectric test (see 4.9.2). The resistance between the connected lead wires, and any portion of the bare metal exposed on the squib case, shall be not less than 50 megohms. The test potential shall be either 1000 ± 100 volts, 60 hertz alternating current (ac) or 500 ± 50 volts dc. The test potential shall be applied for not less than one second.

4.10.3 No-fire sensitivity test (see 4.9.3). The electrical circuit of the squib between the lead wires shall not fire when energized with 0.20 amperes, 24 volts dc for not greater than five seconds.

4.10.4 Firing time test (see 4.9.4). The squib shall fire within the limits specified when energized with 1.5 ± 0.15 amperes dc at 21.1 ± 2.8°C.

4.10.5 Pull test (see 4.9.5). The plug subassembly shall meet the requirements of 3.7 when the individual lead wires are pulled with a force of ten pounds.

4.10.6 Load test (see 4.9.6). The bridge wire subassembly shall meet the requirements of 3.8 when a load of 25.0 grams is applied normal to the axis of the bridge wire at its center.

4.10.7 Output limits test (see 4.9.7). The test shall be performed using a closed bomb test fixture designed by the contractor and approved by the procuring activity. The fixture shall have a volume of ten cubic centimeters (cc) and be instrumented to measure squib output.

4.10.8 Special test procedures.

4.10.8.1 Jolt test (see 4.9.8.1). The squib shall be subjected to the jolt test in accordance with MIL-STD-331 test number 101.

4.10.8.2 Vibration test (see 4.9.8.2). The squib shall be subjected to the transportation-vibration test in accordance with MIL-STD-331 test number 123.

4.10.8.3 Watertightness test (see 4.9.8.3). The squibs shall be subjected to a cycle of 4 pressure conditions for a period of 3 to 5 minutes each. The cycle shall be repeated 21 times continuously. Procedures (a) through (f) are as follows:

a. Submerge squibs in 71.1 ± 5.6°C water at absolute pressure of approximately 58 inches of mercury (inHg)

b. Drain or pump water from chamber

c. Reduce chamber absolute pressure to not greater than 5 inHg

d. Fill chamber with tap water to an absolute pressure of approximately 58 inHg. Temperature differential between tap water and hot water, condition (a), shall be not greater than 32.2°C

e. Drain or pump water from chamber

f. Reduce chamber absolute pressure to not greater than 3 in Hg.

4.11 Inspection of packaging. The sampling and inspection of the preservation, packaging, and container marking shall be in accordance with the requirements of MIL-STD-1169.

5. PACKAGING

5.1 Preservation and packaging.

5.1.1 Level A. In addition to the following, Level A packaging shall be in accordance with Code of Federal Regulations, 49CFR71-78.

5.1.1.1 Cleaning, drying, and preservative application. (This paragraph is not applicable to this specification.)

5.1.1.2 Unit packaging. Unit packaging of the squibs shall be in accordance with PDS numbers to be furnished by the Government. The unit package shall contain four squibs.

5.1.1.3 Intermediate package. Intermediate packaging of the squibs shall be in accordance with PDS numbers to be furnished by the Government. The intermediate package shall contain 100 squibs.

5.2 Packing.

5.2.1 Level A. In addition to the following, level A packing shall be in accordance with Code of Federal Regulations, 49CFR71-78.

5.2.1.1 Exterior containers. Unless otherwise specified in the contract or order, the squibs, packaged as specified in 5.1.1.3, shall be shipped individually or packed in a wood, cleated-plywood box in accordance with PPP-B-601 overseas type, or PPP-B-621, Class 2, gross weight not to exceed 150 pounds (lbs), or in a fiberboard box in accordance with PPP-B-636, Class weather-resistant (gross weight not to exceed 70 lbs).

5.2.2 Level B.

5.2.2.1 Exterior containers. Unless otherwise specified in the contract or order, the squibs, packaged as specified in 5.1.1.3, shall be shipped individually or packed in domestic-type wood box in accordance with PPP-B-601 or PPP-B-621 (gross weight not to exceed 150 lbs) or in a fiberboard box in accordance with PPP-B-636, class weather-resistant (gross weight not to exceed 70 lbs).

5.3 Marking.

5.3.1 Special markings. Marking of exterior containers shall be in accordance with Code of Federal Regulations 49CFR71-78.

5.3.2 Normal markings. In addition to the markings required by contract, purchase order, or drawings, unit packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The squib covered by this specification is intended for use as an igniter for the rocket motors in the 2.75 inch rocket.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of the specification

b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1)

c. Drawings when required, providing dimensions, tolerances, hardness, and other design details (see 3.2)

d. When first article is required (see 3.1 and 4.4)

e. First article sample size (see 4.4.1)

f. Conditions for quality conformance inspection (see 4.5)

g. Requirements for preservation, packing and marking (see 4.1 and section 5)

6.3 First article. When first article inspection is required, the contracting officer should provide specific guidance to offerers whether the item(s) should be a first article sample, a first production item, or a number of items to be tested as specified in 4.4. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results and disposition of first articles. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract.

6.4 Defect reporting. From each lot produced, the contractor shall submit to the address specified in the contract and in accordance with DD Form 1423, the results of the tests specified below within three days after completion of acceptance testing of the lot. The test results are to include data as indicated in Table XIV. A failure analysis is required whenever a unit does not meet the requirements for acceptance of the tests listed in Table XIV. The failure analysis shall contain specific readings for those units which do not meet the specification requirements as well as additional pertinent in formation. Submission of these reports shall be continued for each lot until the contractor has produced 250,000 units in lots accepted without waiver. After this 250,000 units has been produced, a report for every fifth lot for

the duration of the contract shall be required. In addition, a report shall be submitted for every lot that fails to meet the specification requirements. The defect report cycle shall be repeated whenever a first article submission is required, or as directed by the Government procuring activity.

TABLE XIV. Failure analysis testing.

Date _____ Lot No. _____

Accepted_____with waiver

_____without waiver

Electrical Circuit and Continuity Test (see 4.9.1)

No. of units tested	No. of units failed	Failure Analysis
	Dielectric Test (see 4.9.2)	
No. of units tested	No. of units failed	Failure Analysis
	No-Fire Sensitivity Test (see 4.9.3)	
No. of units tested	No. of units failed	Failure Analysis

TABLE XIV. Failure analysis testing - continued.

Firing Time Test (see 4.9.4)		
No. of units tested	No. of units failed	Failure Analysis
Pull Test (see 4.9.5)		
No. of units tested	No. units failed	Failure Analysis
Load Test (see 4.9.6)		
No. of units tested	No. of units failed	Failure Analysis
Output Limits Test (see 4.9.7)		
No. of units tested	No. of units failed	Failure Analysis

6.5 Metrication. Metric equivalents in accordance with FED-STD-376 are acceptable for use in this specification.

6.6 Subject term (keyword) listing.

Charge, explosive
Explosives
Igniter
Rocket assemblies
Support mechanism

6.7 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodian:
Army - MI

Preparing activity:
Army - MI

Project No. 1340 - A838