

INCH-POUND

MIL-DTL-82939(OS)
11 February 2000

MILITARY SPECIFICATION

SEPARATOR, EXPLOSIVE (1W18)

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Departments of Defense.

1. SCOPE

1.1 Scope. This specification covers the requirements for an Explosive Separator (1W18), Drawing 838AS220, hereto referred to as separator and its explosive component BBU-55/B explosive bolt, drawing 838AS221.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this specification are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issue 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

DEPARTMENT OF DEFENSE

MIL-I-23659 Initiators, Electrical, General Design Specification for

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Indian Head Division, Naval Surface Warfare Center, Standardization Team (Code 840M), 101 Strauss Avenue, Indian Head, MD 20640-5035, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by sending a letter.

AMSC N/A

FSC 1377

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-1168 Ammunition Lot Numbering and Ammunition Data Card

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

2.2.2 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

Naval Air Systems Command (CAGE Code 30003)

838AS220	Explosive Separator
838AS221	Bolt, Explosive, BBU-55/B
838AS222	Shock/Vibration Test Fixture

(Application for copies should be addressed to: Commander, Indian Head Division, Naval Surface Warfare Center, Attn: Data Control Branch (Code 8410), Indian Head, MD 20640-5035.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

Holex Dwg. F10369 Rev E Fixture

AMERICAN SOCIETY FOR TESTING & MATERIALS

ASTM E1742 Standard Practice for Radiographic Examination

(Application for copies should be addressed to American Society for Testing & Materials 100 Bar Harbor Drive West Conshohocken, PA 19428-2959)

2.4 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 of the separator shall be subjected to first article inspection (see 6.3) in accordance with 4.2. Because the explosive bolt is an integral part of the

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separator, first article testing for the bolt will be tested in fully assembled separators only in accordance with 4.2.

3.2 Primary components. Only the BBU-55/B Explosive Bolt is classified as a primary component. The primary component shall have been manufactured not more than 1 year prior to the date of separator assembly. Only one lot of each primary component shall be used in a separator lot. One primary component lot may be used in more than one separator lot. The BBU-55/B and explosive separator assembly design and construction shall be identical to that subjected to qualification testing and approved for service use.

3.3 Explosive Bolt Inspection. The bolt shall be manufactured in accordance with Drawing 838AS221. Each production bolt shall meet the requirements of 3.3.1 through 3.3.5.

3.3.1 Visual inspection. All bolts shall be visually inspected and screened for defects as outlined in 4.4.1.1. The bolts shall not have illegible descriptive markings, dents, deep scratches, or other defects which may prevent proper installation or function.

3.3.2 Radiographic inspection. All bolts shall show proper assembly, presence of parts, and sealing with no metallurgical defects when examined radiographically in accordance with 4.4.2.

3.3.3 Bridgewire resistance. The bridgewire resistance of circuits AB and CD in each bolt shall be 1.15 ± 0.15 ohms when tested in accordance with 4.4.3.

3.3.4 Insulation resistance. The bolt insulation resistance shall be 5 megohms, minimum, when tested in accordance with 4.4.4. The insulation resistance test shall not dud or adversely affect the bolt or cause the bolt to fire, arc-over, flash-over, or breakdown.

3.3.5 Explosive bolt performance. Bolts shall be capable of meeting the requirements of 3.3.5.1 through 3.3.5.5.

3.3.5.1 Electrostatic discharge. The bolt shall not fire when static discharge tested in accordance with 4.4.5.

3.3.5.2 Leakage. The bolt hermetic seal shall not exhibit a leakage rate in excess of 1×10^{-5} cm³/sec air (2.4×10^{-5} cm³/sec helium) when tested in accordance with 4.4.6.

3.3.5.3 No-fire. The bolt shall not ignite or dud when tested in accordance with 4.4.7.

3.3.5.4 Proof load. The bolt shall be capable of withstanding a 90,000-pound axial load and a 750-inch-pound torsional load without permanent deformation when tested in accordance with 4.4.8.

3.3.5.5 Bolt function. The bolt shall fire and fracture completely within 50 ms in a no proof load condition, as installed in the separator, when 5 amps is applied to either bridge circuit when tested in accordance with 4.4.14.

3.4 Separator production. The assembled separators shall be manufactured in accordance with Drawing 838AS220. Each production separator shall meet the requirements of 3.4.1 through 3.4.4. The

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explosive separator assembly design and construction shall be identical to that subjected to qualification testing and approval for service use.

3.4.1 Visual inspection. All separators shall be visually inspected and screened for defects as outlined in 4.4.1.2. The separators shall not have illegible descriptive markings, dents, deep scratches, or other defects which may prevent proper installation or function.

3.4.2 Radiographic inspection. All separators shall show proper assembly, presence of parts, and sealing when examined radiographically in accordance with 4.4.2.

3.4.3 Bridgewire resistance. The bridgewire resistance of circuits AB and CD in each separator shall be 1.15 ± 0.15 ohms when tested in accordance with 4.4.3.

3.4.4 Proof load tests. All separators shall be subjected to a proof load test of 90,000 pounds axial load and 750 inch-pounds torsional load in accordance with 4.4.8. The separators shall show no visual evidence of permanent deformation or structural failure.

3.5 Separator performance. Separators shall be capable of meeting all requirements of 3.5.1 through 3.5.9.

3.5.1 Insulation resistance. The separator shall not have a leakage current in excess of 0.1 milliamperes when tested in accordance with 4.4.4.

3.5.2 Electrostatic discharge. The separator shall not fire or dud when static discharge tested in accordance with 4.4.5.

3.5.3 No-fire. The separator shall not ignite when tested in accordance with 4.4.7.

3.5.4 Temperature, humidity, and altitude cycling. The separator shall not incur damage nor deformation when subjected to temperature, humidity, and altitude cycling in accordance with 4.4.9.

3.5.5 48-hour salt fog. The separator shall not incur damage nor deformation when subjected to the 48-hour salt fog test in accordance with 4.4.10.

3.5.6 Shock. The separator shall not incur damage nor deformation when subjected to the shock test in accordance with 4.4.11.

3.5.7 Vibration. The separator shall not incur damage nor deformation when subjected to the vibration test in accordance with 4.4.12.

3.5.8 Six-foot drop. The separator shall not incur damage nor deformation which shall prevent installation when subjected to the 6-foot drop test in accordance with 4.4.13.

3.5.9 Separator function. The separator shall separate completely, within 50 ms, when a current of 5.0 amperes is applied to either bridgewire circuit when tested in accordance with 4.4.14.

3.6 Workmanship. The bolt and separator shall be constructed and finished in a manner to assure compliance with all requirements of this specification.

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4. QUALITY ASSURANCE PROVISIONS

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

- a. First article inspection (see 4.2)
- b. Conformance inspection (see 4.3).

4.2 First article inspection. Unless otherwise specified in the contract or purchase order (see 6.2), a first article sample of 15 separators shall be subjected to first article testing as specified in Table I. Any damage inflicted by the environmental treatments which would adversely affect the performance of the item in the service application shall be cause for rejection of the first article sample. Any further production prior to notification by the contracting agency of first article acceptability shall be at the contractor's risk. Failure of any separator to comply with the requirements of section 3 shall be cause for rejection of the first article represented.

4.3 Conformance inspection. The conformance inspection shall consist of the inspections given in 4.3.1 through 4.3.3.

4.3.1 Explosive bolt production inspection. All production explosive bolts manufactured under the contract shall be inspected and screened for the defects specified in Tables IIA and IIB. Bolts failing to meet the requirements shall be rejected and removed. If bolts are being procured for use in separators not manufactured by the bolt manufacturer, a sample of bolts shall be subjected to the tests of 3.3.5. The sample shall be in accordance with Table V except no retains shall be required. Failure of any sample bolt to comply with the requirements of 3.3.5 shall be cause for rejection of the lot represented. Marriage logs shall be maintained to track bolt to separator assembly.

4.3.2 Separator production inspection. All production separators manufactured under the contract shall be inspected and screened for the defects as specified in Table III. Separators failing to meet the requirements listed in Table III shall be rejected and removed from the lot.

4.3.3 Separator lot acceptance inspection. Lot acceptance inspection shall consist of the examinations and tests specified in Table IV. Failure of any sample separator to comply with the requirements listed in Table IV shall be cause for rejection of the lot represented. Packaging defects shall be corrected before acceptance.

4.3.3.1 Sample size. A random sample from each production lot, including the retained sample for investigative purposes, shall be selected in accordance with Table V for lot acceptance inspection. Test sample separators and separators for investigative purposes (retain samples) shall not be applied as part of the quantity specified for delivery by the contract or purchase order.

4.4 Inspections and tests.**4.4.1 Visual inspections.**

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TABLE I. First article test schedule.

Tests	Requirement Para.	Test Para.	A	B	C	D	E	F	G
V sua nspect on	3.4.1	4.4.1.2	2	2	2	2	3	2	2
Rad ograph c nspect on	3.4.2	4.4.2	2	2	2	2	3	2	2
Br dgew re res stance	3.4.3	4.4.3	2	2	2	2	3	2	2
Insu at on res stance	3.5.1	4.4.4	2	2	2	2	3	2	2
E ectrostat c d scharge	3.5.2	4.4.5	2	2	2	2	3	2	2
No-f re	3.5.3	4.4.7						2	2
Temperature, hum d ty, and a t tude cyc ng	3.5.4	4.4.9	2						
48-hour sa t fog	3.5.5	4.4.10		2					
Shock	3.5.6	4.4.11			2				
V brat on	3.5.7	4.4.12				2			
S x-foot drop	3.5.8	4.4.13					3		
Rad ograph c nspect on	3.4.2	4.4.2			2	2	3		
Br dgew re res stance	3.4.3	4.4.3	2	2	2	2	3	2	2
Proof oad	3.4.4	4.4.8	2	2	2	2	3	2	2
Functiona -65°F 70°F 165°F	3.5.9	4.4.14	2	2	2	2	3	2	2

TABLE IIA. Explosive bolt production inspection.

Test	Requirement	Test Method
V sua nspect on	3.3.1	4.4.1.1
Rad ograph c nspect on	3.3.2	4.4.2
Br dgew re res stance	3.3.3	4.4.3
Insu at on res stance	3.3.4	4.4.4
E ectrostat c d scharge	3.3.5.1	4.4.5
Leakage	3.3.5.2	4.4.6
Proof oad	3.3.5.4	4.4.8

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TABLE IIB. Explosive bolt lot acceptance inspection and test.

Test	Requirement	Test Method
V sua nspect on	3.3.1	4.4.1.1
Rad ograph c nspect on	3.3.2	4.4.2
Br dge w re res stance	3.3.3	4.4.3
Insu at on res stance	3.3.4	4.4.4
E ectrostat c d scharge	3.3.5.1	4.4.5
Leakage	3.3.5.2	4.4.6
No-f re	3.3.5.3	4.4.7
Proof oad	3.3.5.4	4.4.8
Bolt function	3.3.5.5	4.4.14

TABLE III. Separator production inspections.

Test	Requirement Paragraph	Test Paragraph
V sua nspect on	3.4.1	4.4.1.2
Rad ograph c nspect on	3.4.2	4.4.2
Br dge w re res stance	3.4.3	4.4.3
Proof oad	3.4.4	4.4.8

TABLE IV. Separator lot acceptance inspections and tests.

Test	Requirement Paragraph	Test Paragraph	Quantity
V sua nspect on	3.4.1	4.4.1.2	Test and retain sample
Rad ograph c nspect on	3.4.2	4.4.2	Test and retain sample
Br dge w re res stance	3.4.3	4.4.3	Test and retain sample
No-f re	3.5.3	4.4.7	Test
Proof oad	3.4.4	4.4.8	Test
Functiona -65°F 165°F	3.5.8	4.4.14	½ test sample ½ test sample

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TABLE V. Lot acceptance sampling.

Lot s ze	Destruct ve Test Samp e S ze	Retain Samp e S ze	Tota Samp e S ze
9 - 25	4	1	5
26 - 90	6	1	7
91 - 150	8	2	10
151 - 280	13	2	15
281 - 500	20	2	22

4.4.1.1 Explosive bolt inspection. The external condition and appearance of the bolts shall be determined by comparison to Drawing 838AS221. Specific inspections of the electrical connector, lead wires, threads, and identification markings shall be conducted at a minimum. Each bolt shall meet the requirements of 3.3.1 and 3.6.

4.4.1.2 Separator inspection. The external condition and appearance of the separators shall be determined by comparison to Drawing 838AS220. Specific inspections of the electrical connector, shunt device, threads, and identification label shall be conducted at a minimum. Each separator shall meet the requirements of 3.4.1 and 3.6.

4.4.1.3 Packaging inspection. Packaging (inner and intermediate containers), packing (outer container), and marking shall be in accordance with section 5.

4.4.2 Radiographic inspection. Radiographic examination shall be in accordance with ASTM E1742. The bolts or separators shall be positioned for the most revealing exposure with the long axis perpendicular to the radiographic beam. Each bolt or separator shall be identified with serial numbers beginning with 001 prior to examination. The bolts and separators shall be arranged on boards or trays in consecutive order with any missing serial numbers identified on the radiographic plate. Each radiograph shall carry a permanent identification of the items displayed thereon in a 4-inch by 6-inch region, maximum. The radiographic identification shall include the drawing number, the contractor part number, the complete lot number in accordance with MIL-STD-1168, the contract number, and the span of serial numbers displayed. Radiographs of the entire production lot shall accompany the ballistic sample to the activity conducting the tests. Radiographs of the explosive bolts must also be provided with marriage log in accordance with 4.3.1. Any observable imperfections as outlined in 3.3.2 or 3.4.2 shall be cause for rejection of the bolt or separator, respectively. Defective bolts or separators found during radiographic review are to be marked on the radiographic plate and removed from the production lot.

4.4.3 Bridgewire resistance. The bridgewire resistance of circuits AB and CD in each bolt or separator shall be determined and recorded using a test meter having an accuracy within 0.01 ohms and an impressed current limited to 10 milliamperes. Only bolts or separators having a bridgewire resistance as per paragraph 3.4.3 shall be considered acceptable. Failure in a sample shall require corrective action or lot rejection.

4.4.4 Insulation resistance. Each bolt or separator in a sample shall have 500 ± 25 volts direct current (Vdc) applied between the pins in parallel circuit and the separator case for 60 seconds. A leakage

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current that exceeds 0.1 milliamperes shall be cause for rejection of the bolt or FAT sample separator lot. The bolt or separator resistance shall be measured following this test.

4.4.5 Electrostatic discharge. Each bolt or separator shall be subjected to an electrostatic discharge between the pins shorted together and the case of the separator in accordance with MIL-I-23659. The bolt or separator shall not fire, dud, or otherwise be affected when subjected to the electrostatic discharge. Units failing to meet requirements shall be cause for rejection of the bolt.

4.4.6 Leakage. Each bolt shall be subjected to helium at a pressure differential of 1.0 ± 0.1 atmospheres for 1 hour. The bolts shall be removed from the helium environment and tested in a helium spectrometer within 15 minutes of removal. If a bolt fails to meet the leakage requirement of 3.3.5.2, this shall be cause for rejection of that bolt.

4.4.7 No-fire. Each sample bolt or separator shall be subjected to 1 ampere and 1 watt applied through both bridgewires in series for 5 minutes minimum. If any of the sample bolts or separators subjected to no-fire fail to meet the requirements of 3.3.5.3 or 3.5.3, respectively, the entire production lot shall be rejected.

4.4.8 Proof load tests. Each bolt or separator in a lot shall be installed in a test fixture capable of producing a 90,000-pound axial load and a 750-inch-pound torsional load. The torsional load shall be introduced before the axial load. The 90,000-pound axial load shall be maintained for a minimum of 5 seconds, then released. The bolt or separator shall be visually examined for permanent deformation or structural failure. Failure to meet requirements shall result in rejection of the unit.

4.4.9 Temperature, humidity, and altitude (THA). THA testing shall be 28 days in accordance with MIL-I-23659. The separators shall withstand the THA environment and then meet post-test inspections of table I and functional performance requirements.

4.4.10 48-hour salt fog. Salt fog testing shall be 48 hours in accordance with MIL-I-23659. The separators shall withstand the salt fog environment and then meet post-test inspections of Table I and functional performance requirements.

4.4.11 Shock. Separators shall be mounted in a fixture conforming to Drawing 838AS222 and subjected to 10 shocks of 15 "G" maximum acceleration in all three axes. The maximum acceleration of 15 "G" shall be reached in a maximum of 8 milliseconds, and the acceleration shall exceed 8 "G" for at least 11 milliseconds. The 15 "G" shock shall be applied in the longitudinal axis only. The separator shall not fire when subjected to shock testing. Each separator shall also meet post-test inspections of Table I and functional performance requirements.

4.4.12 Vibration. Separators shall be securely installed in a fixture conforming to Drawing 838AS222. The separator shall not fire when subjected to vibration testing. Each separator shall also meet post-test inspections of Table I and functional performance requirements.

4.4.12.1 Procedure. The vibration test shall be conducted with the frequency cycling between 10 and 2,000 Hz (logarithmically) in 15 minute cycles with an amplitude of 0.018 inch (total excursion 0.036 inch) or an applied acceleration of ± 10 g, whichever is the limiting value. Two separators shall be

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vibrated in each of the following orientations: Parallel to the longitudinal axis of the explosive bolt and perpendicular to the axis (see Figure 1 for definition of axis). Vibration times shall be according to Table VI.

Table VI. Vibration test schedule
(Times refer to one position)

Type	Vibration at Room Temperature	Vibration at +160°F	Vibration at 65°F
Cycling	60 minutes	15 minutes	15 minutes
Resonance	60 minutes	15 minutes	15 minutes

4.4.12.2 Resonance. Resonance frequencies shall be determined by varying the frequency of applied vibration through the specified range at amplitudes or accelerations not exceeding those shown in Figure 2 for each position. The test specimen shall then be vibrated at the most severe resonant frequencies with the applied amplitude shown in Figure 2. If no resonant frequencies are found, the specimen shall be vibrated for twice the time shown in Table VI for resonance at a frequency of 55 cps and an applied amplitude of 0.030 inch (total excursion of 0.060).

4.4.13 Six-foot drop. Drop separators onto a 2-inch-thick steel plate embedded in concrete from a minimum height of 6 feet. Guide the items so that they impact the steel plate as follows: (1) body, release end up; (2) body, release end down; (3) horizontal. Use a new separator for each drop. The separators shall not fire when dropped from a height of 6 feet. Each separator shall meet the post-test inspections of Table I and functional performance requirements.

4.4.14 Functional (destructive) tests. One-half of the LAT sample shall be subjected to functional testing at 165°F and the other half at 65°F. The temperature conditioning time shall be a minimum of 4 hours after temperature stabilization and a maximum of 24 hours at the respective temperature. The tests at each respective temperature shall be conducted with one-half the sample at extreme load (see 3.4.4) and the other half with no load present. If the sample is not evenly divisible by four, priority of test conditions shall be at the discretion of Naval Surface Warfare Center, Indian Head, Maryland. The functional test shall be performed in a test fixture (Holex drawing F10369 Rev E) capable of producing a 90,000-pound axial load and a 750-inch-pound torsional load. The bolt or separator shall be functioned by applying 5 amps to either bridgewire. Failure shall result in lot rejection.

4.4.14.1 Test failure. If a test failure is attributable to an assignable cause, excluding the test bolt or separator, the original test results shall be discarded and the test reconducted.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Points packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

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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 separator is used to release any load from the CH-53E or MH-53E Helicopter Single Point Cargo Hook in the event of an emergency. As the separator is designed for use only with cargo hooks on military helicopters, it has no commercial application.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and revision letter of this specification.
- b. Issue of DODISS to be cited in the solicitation and, if required, the specific issue of individual documents referenced (see 2.2.1, 2.2.2 and 2.3).
- c. Whether a first article sample is required and, if so, the test activity (see 3.1 and 4.2).
- d. Production lot size and test activity (see 4.3.3.1).
- e. Directions for shipping: radiographs of explosive bolts, the entire production lot of separators, along with ballistic sample to the activity conducting production lot acceptance tests.
- f. Items of data required for each first article and production lot, including explosive bolt test data and marriage log to separators.
- g. Packaging requirements.
- h. Ammunition data cards in accordance with MIL-STD-1168.
- i. Submission of rework procedures, acceptance test and inspection procedures, and explosive bolt acceptance test and inspection results.
- j. That the safety precaution requirements of the "Contractor's Safety Manual for Ammunition, Explosives, and Related Dangerous Material," DOD 4145.26M are applicable. NOTE: When this specification is used as part of the description of work to be accomplished by a Government activity, the safety precaution requirements of "Ammunition and Explosives Ashore," OP 5 are applicable.

6.3 First article. When a first article inspection is required, the contracting officer should provide specific guidance to offerors whether the items should be a first article sample or a sample selected from the first production items (see 3.1), and the number of items to be tested as specified in 4.2. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for examination, 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

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appropriate for the pending contract. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

6.4 Loaded assembly hazard information.

DOD, DOT, NATO Hazard Classification	Class 1, Division 4
United Nations Serial Number	0173
Storage Compatibility Grouping	S
DOD Markings	Explosive Separator

6.5 Definitions.

6.5.1 Stabilized. A stabilized separator is the same temperature throughout.

6.6 Subject term (keyword) listing.

Explosives
Helicopter
Separator

Preparing activity
Navy - OS
(Project 1377-0103)

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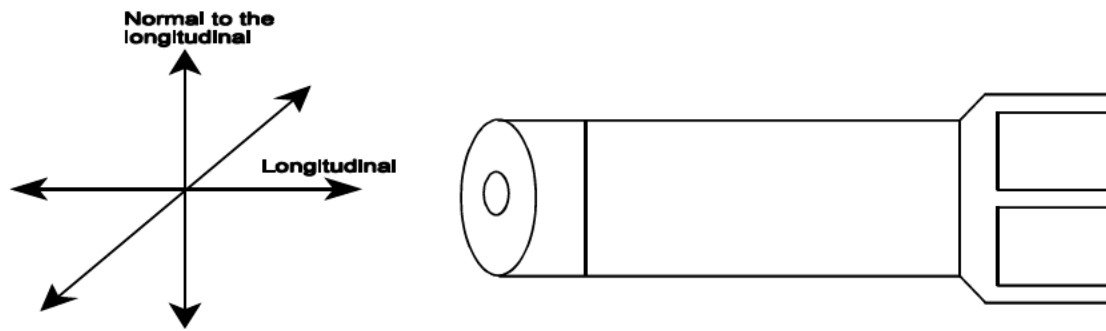
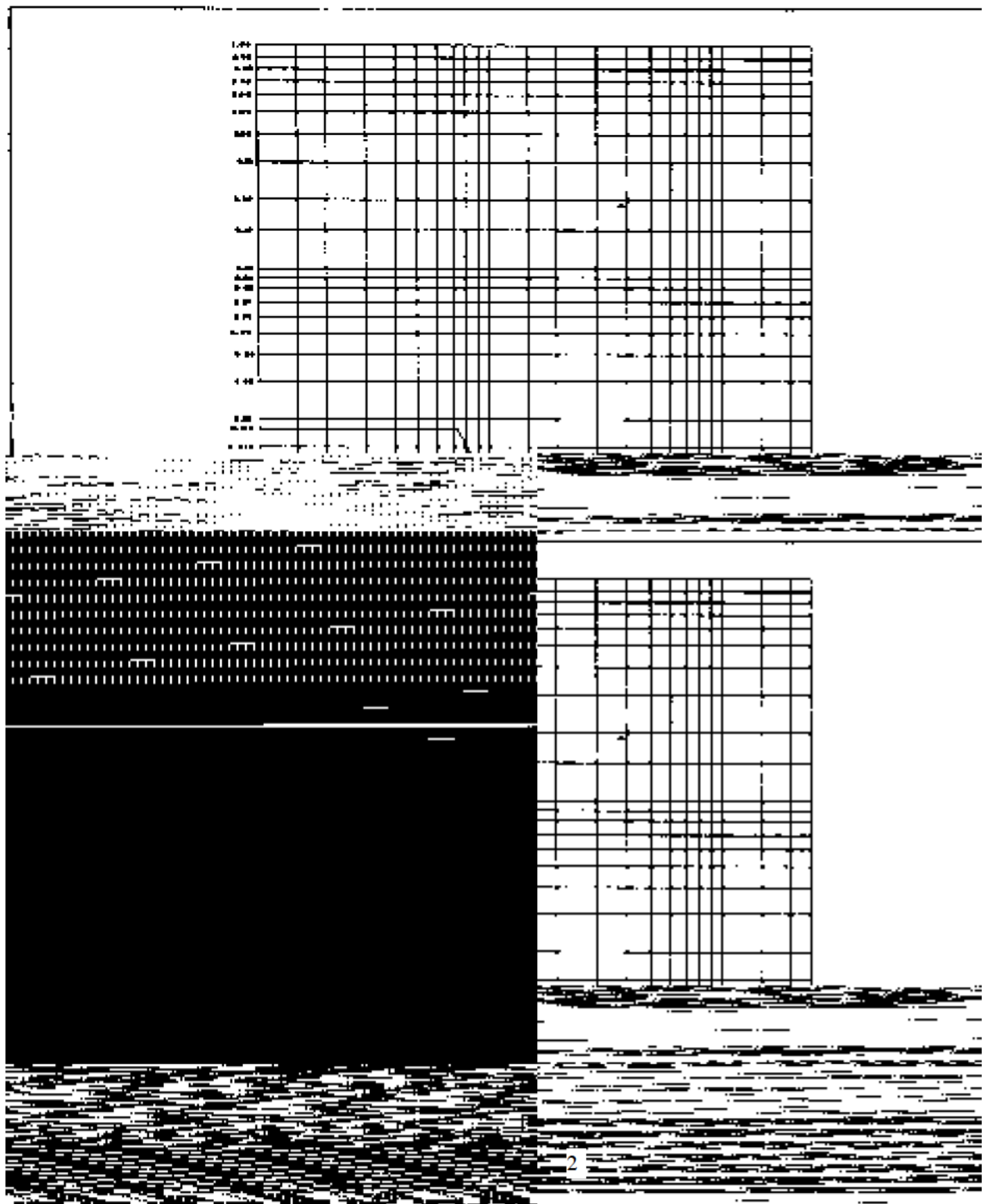


FIGURE 1. Separator, Explosive (1W18), Definition of Axes

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:		1. DOCUMENT NUMBER MIL-DTL-82939	2. DOCUMENT DATE (YYMMDD) 11 February 2000
3. DOCUMENT TITLE SEPARATOR, EXPLOSIVE (1W18)			
4. NATURE OF CHANGE (<i>Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.</i>)			
5. REASON FOR RECOMMENDATION			
6. SUBMITTER			
a. NAME (<i>Last, First, Middle Initial</i>)		b. ORGANIZATION	
c. ADDRESS (<i>Include Zip Code</i>)		d. TELEPHONE (<i>Include Area Code</i>) (1) Commercial (2) DSN (<i>If applicable</i>)	7. DATE SUBMITTED (YYMMDD)
8. PREPARING ACTIVITY			
a. NAME Commander, Indian Head Division Naval Surface Warfare Center		b. TELEPHONE (<i>Include Area Code</i>) (1) Commercial 301-744-4700 (2) DSN 354-4700	
c. ADDRESS (<i>Include Zip Code</i>) Standardization Team (Code 840M) 101 Strauss Avenue Indian Head, MD 20640-5035		IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, VA 22060-6221 Telephone (703) 767-6888 DSN 427-6888	