

Appendix B

Hazardous Materials Factual Report

Information Provided by RSPA

Rancho Cordova, CA
DCA-00-MA-026



DoD 4145.26-m

US DEPARTMENT OF TRANSPORTATION
400 7th STREET S.W.
WASHINGTON, D.C. 20590

FACSIMILE COVER SHEET
FAX NUMBER 202-366-3753

DATE: 2/18/00 TIME: 3:50

NUMBER OF PAGES _____

TO: Jim Henderson

ORGANIZATION: _____

TELEPHONE NUMBER: [REDACTED]

FAX NUMBER: [REDACTED]

FROM: Christine Whitney

DEPARTMENT: _____

TELEPHONE NUMBER: _____

E-MAIL: _____

SUBJECT: _____

Jim - Here's the EX-file &
a computer-generated approval
letter - Mr. Holtzman has the
original - it would have had
Al Roberts name on the signature
block - Call me Tues if you need
to - [REDACTED] - Tina Whitney

**ET, INC.**

A DIVISION OF


 POST OFFICE BOX KK • FAIRFIELD, CA 94533-0930
 TELEPHONE (707) 422-1880 • TWX 510-748-2043

TELECOPIER TRANSMITTAL
Telecopier No. (707) 422-3242

TO: DOT	REFERENCE NO: 4ME-16026
ATTN: CAROL MONROE	DATE: 28 APRIL 1994
	TIME TRANSMITTED:
TEL NO: [REDACTED]	FAX NO: 202*366*3753
FROM: MARLA ENOS	NO. OF PAGES: COVER ONLY
TITLE: CLERK TYPIST II	TRANSMITTAL NO: 94-04-ME-

GOOD MORNING CAROL,

I AM FOLLOWING UP ON THE STATUS OF PN 52192. WE ARE SHIPPING THE FIRST PART OF NEXT WEEK. I WOULD APPRECIATE IF YOU WOULD FAX A COPY OF OUR LETTER (PN 52192) AND VIA MAIL THE ORIGINAL ASAP.

SORRY FOR THE RUSH AND HOPE IT IS NOT TOO MUCH OF AN INCONVENIENCE.

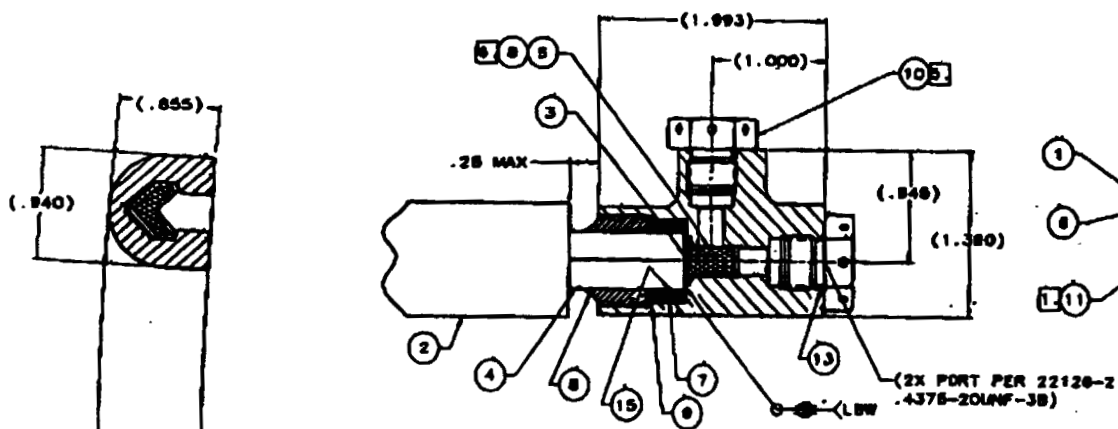
THANK YOU CAROL AND I HOPE YOU HAVE A NICE DAY.

NOTES:

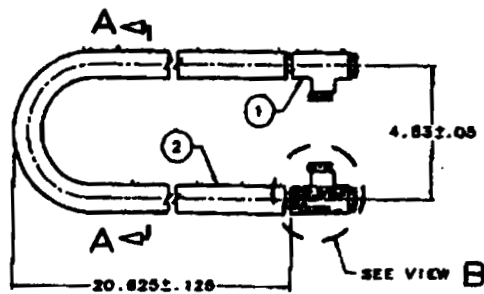
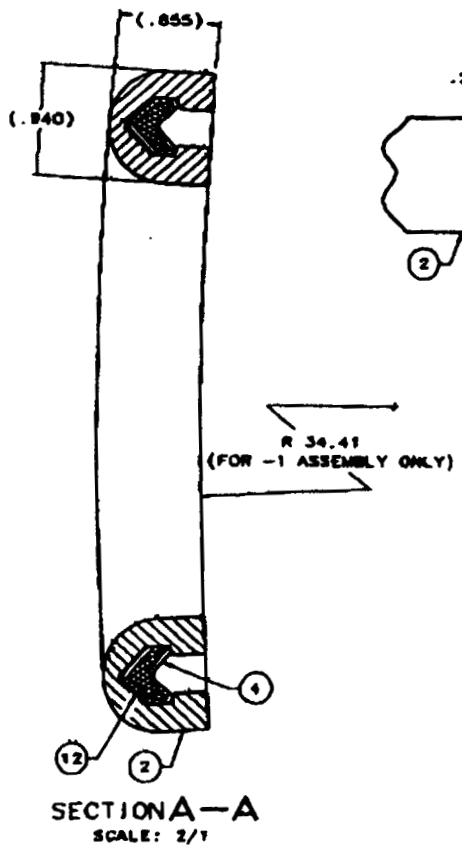
1. REQUIRED INFORMATION TYPED ON FIND NO. 11 AND ATTACHED ON SURFACE SHOWN OF FIND NO. 1.
2. MANUFACTURED PER 11820(01)MP.
3. ACCEPTANCE TESTED PER 11820(01)ATP.
4. FIND NO. 4 BONDED TO FIND NO. 2 WITH FIND NO. 12.
5. FIND NO. 10 TORQUED TO 80 TO 100 INCH-POUNDS.
6. FIND NO. 5 BONDED IN PLACE WITH FIND NO. 8.

REV	DATE	BY	APP

APR 15 1994
REFERENCE COPY
 WILL NOT BE UPDATED



VIEW B
 SCALE: 2/1
 TYPICAL VIEW BOTH ENDS



PART NO. CROSS REFERENCE		
ET, INC PART NO.	MSSC, CASE CODE 18355, PART NO.	DESCRIPTION
52218-1	1D47087-XXX	WITH RADIUS
52218-2	---	WITHOUT RADIUS

AR	AR	QTY	DESCRIPTION	QTY
AR	AR	80393-1	PRIMER, ADHESIVE, S-11	15
2	2	28884-1	SPACER	14
4	4	NA31596-4	PACKING, PREFORMED	13
AR	AR	80171-1	ADHESIVE, SILICONE, RTV 182	12
1	1	28888-1	NAMEPLATE	11
4	4	MS8964-04	PLUG, MACHINED THREAD-DRILLED (7/16)	10
AR	AR	80181-1	ADHESIVE, CONDUCTIVE	8
AR	AR	80174-1	ADHESIVE, EPOXY, C-7/W	8
AR	AR	80182-1	RUBBER, ECCOSIL 4640	7
AR	AR	MS20986C20	WIRE, SAFETY OR LOCK	6
2	2	28870-1	TRANSFER CHARGE	5
1	1	41038-1-60	JETCORD, HC-300-J	4
2	2	52218-01	CLOSURE-MATERIAL: MIMEL 201, DRILLING THICK	3
1	1	28888-1	CHARGE HOLDER, HC-300-J	2
2	2	28867-3	TEE FITTING	1

AUTHORIZED SIGNATURE DATE TITLE ORGANIZATION	AUTHORIZED SIGNATURE DATE TITLE ORGANIZATION	ET, INC A SUBSIDIARY OF OCA, THE OCA GROUP DESTRUCT CHARGE ASSEMBLY, SECOND STAGE PART NO. 52218 REV. 10/78
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COMPANY PROPRIETARY
SHIPPING CLASSIFICATION ENGINEERING WORKSHEET

1. COMMENTS TO EXPLOSIVE WEIGHT COMPUTATION:

2. SIMILAR PART NUMBERS, PRODUCTS AND CLASSIFICATION ANALYSIS:

*Similar to
PN 52132-1 GPM Linosa Shaped Charge Assembly
1309 same Transfer Bezzle and Card (N.C.-300-F)
See attached shipping classification letter*

3. ARE THESE ITEMS DESIGNED AND PACKAGED SO THAT THEY WILL NOT FUNCTION OTHER ITEMS SYMPATHETICALLY AND WILL PROHIBIT CROSS PROPAGATION?:

We have not and plan not to, test for this. Probably will sympathetically detonate.

Engineering *[Signature]*
(signature)

Date _____



COMPANY PROPRIETARY
REQUEST FOR SHIPPING CLASSIFICATION

TO BE COMPLETED BY ENGINEERING

REQUESTOR Nistha DATE 12/6/93 SALES ORDER NO. 11820

TOP ASSEMBLY PART NAME Detonate Charge Assembly, Second Stage

TOP ASSEMBLY ET PART NO. 52210

TOP ASSEMBLY CUSTOMER PART NO. 1D47007-501
(Enter NA if not applicable)

MILITARY APPLICATION YES X NO

NOTE 1: THIS FORM IS TO BE USED FOR ONE TOP ASSEMBLY ONLY, HOWEVER, MORE THAN ONE DASH NUMBER MAY BE INCLUDED IF THE EXPLOSIVE WEIGHTS ARE IDENTICAL.

NOTE 2: TWO COPIES OF THE TOP ASSEMBLY DRAWING, EXPLOSIVE SUBASSEMBLIES AND ALL EXPLOSIVE COMPONENT DRAWINGS MUST BE ATTACHED TO THIS REQUEST.

COMPONENT PART NO.	EXPLOSIVE TYPE	EXPLOSIVE WEIGHT PER UNIT*	TIMES	UNITS PER ASSEMBLY**	-	WEIGHT IN GRAMS
25070-1	HMX	.460 gms	X	2	-	.920
H1038-1-50	HMX	19.44 g/ft.	X	4.17 ft	-	81.06
			X		-	
			X		-	
			X		-	
			X		-	
TOTAL EXPLOSIVE WEIGHT						81.98 gms.

Complete Engineering Worksheet, Form ET-1277-1.

TO BE COMPLETED BY SHIPPING/RECEIVING SUPERVISOR. DATE: 12-7-93 ON THE FOLLOWING BASIS, WE RECOMMEND CLASSIFICATION OF THIS PRODUCT AS UN 0288, I.I.D.
BASIS: SIMILAR TO ET P/N 52132 CLASSIFIED AS UN0288 OR EX-920601A.
ATTACH ADDITIONAL SHEETS IF NECESSARY. (signature) [Signature]

*For Cord products, indicate explosive weight per unit in gram per foot (g/ft), by converting from grains per foot (gr/ft) as follows: gr/ft x 0.0648 = g/ft.

**For TLX products, indicate the longest and shortest lengths (use a separate line for each entry).



W.S. Chang, Director
Hazardous Materials Control



ASSOCIATION
OF AMERICAN
RAILROADS

6-2-1
April 4, 1994
WSC/tc

Mr. A. T. Holzman
Material Manager
ET, Inc.
P. O. Box KK
Fairfield, CA 94533-0659

Et-9405018

Dear Mr. Holzman:

The devices described in your letters of December 9, 1993, March 25, 1994 and attached drawing # 52218 is properly described as Charges, Shaped, Flexible, Linear (UN number: 0288) and classified as Explosive (1.1) in accordance with Sections 172.101, 173.59 of the DOT Hazardous Materials Regulations.

Required packaging and labelling for surface transportation (rail and highway) may be found in sections as follows:

- A. Packaging -- Section 173.52
- B. Marking -- Section 172.300
- C. Labelling -- Section 172.411, Explosive 1.1 Label

Section 173.56 requires that except for shipments of sample quantities, a written notification of the classification and approval accompanied by a supporting laboratory report or equivalent data must be filed with the Department of of Transportation before any new explosive device is offered for shipment.

If we may be of further service, please advise.

Very truly yours,

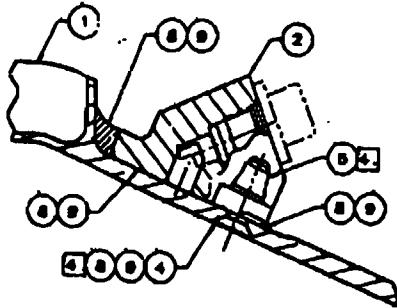
W. S. Chang
Director

* It is also recommended to classify this device as Detonating Fuze Class A Explosive under the old CFR 49.

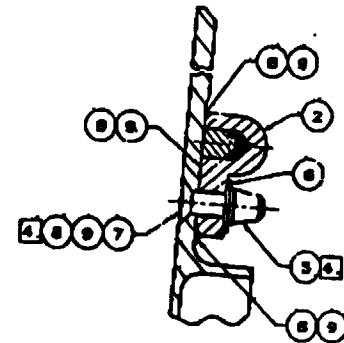
Bureau of Explosives
P.O. Box 415, Short Hills, NJ 07078
Office: 201/467-2237

NOTES:

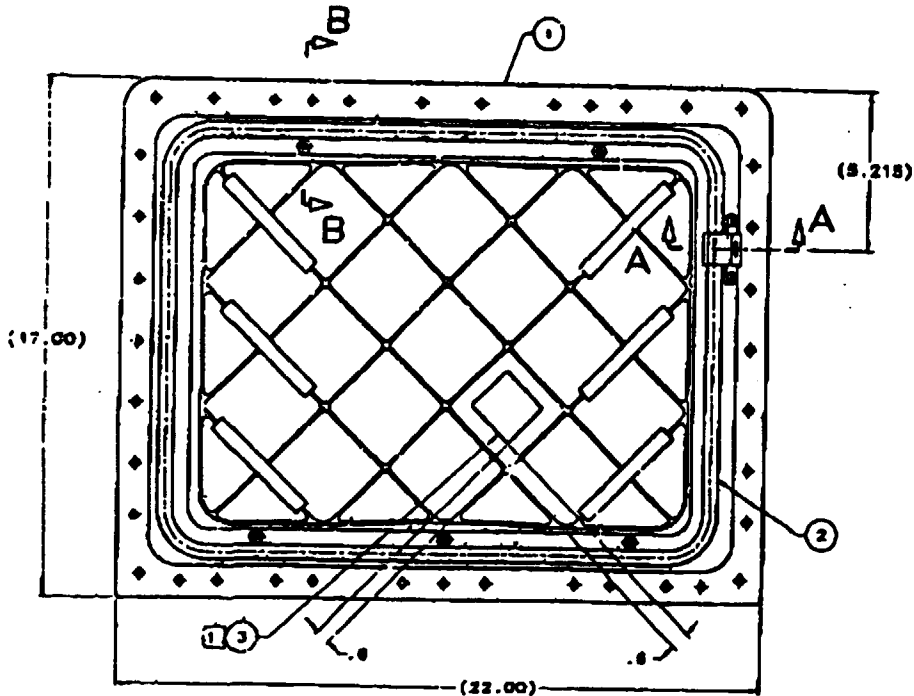
1. REQUIRED INFORMATION TYPED ON FIND NO. 3 AND ATTACHED AS SHOWN.
2. MANUFACTURED PER 10890(08)MP-REFERENCE.
3. ACCEPTANCE TESTED PER 10890(01)ATP.
4. FIND NO. 4, 5 AND 7 TORQUED TO 25 TO 35 IN-LBS.
5. ACCEPTABLE ALTERNATES FOR FIND NO. 8 ARE ET PART NO. 8088-1, -3 OR -4.
6. BARE ALUMINUM OF FIND NO. 1 NOT COVERED BY FIND NO. 8 SHALL BE TOUCHED-UP WITH FIND NO. 10.



SECTION A-A
SCALE: 2/1



SECTION B-B
SCALE: 2/1



APR 15 1994
REFERENCE COPY
WILL NOT BE UPDATED

PART NO. CROSS REFERENCE	
ET, INC	NORTHROP CORP AIRCRAFT DIVISION,
PART NO.	CADE CODE 78823, PART NO.
52192-1	74A342821-1001

AR	PRIMER, EPOXY-POLYAMIDE H.	10
AR 0NYS9	PR-148 PRIMER	9
AR	80861-1 SFALANT, PR-1750 9 (VENDOR ITEM-NET 530) (S)	8
8	78301 STM780T3L7 PIN, RIVET, 100 DEGREE CBX, CROWN HD	7
5	AN880C10L WASHER, FLAT	6
7	78301 ST3MS28CM COLLAR, RIVET PIN-THREADED, SELF-LOCKING	5
2	78301 STM780T3L5 PIN, RIVET, 100 DEGREE CBX, CROWN HD	4
1	28832-1 NAMEPLATE	3
1	25825-1 PYROTECNICS SUBASSEMBLY	2
1	78823 NAMEPLATE-8088 DOOR, DFIR	1

NEW NUMBERING: NOOD19-42-0-8068 DATE: 11/17/94 BY: [Signature] CHECKED: [Signature] APPROVED: [Signature]	LAYOFF: [Signature] DATE: 11/17/94 BY: [Signature] CHECKED: [Signature] APPROVED: [Signature]	ET, INC A DIVISION OF OGA, INC 10000 W. 10TH AVE. DENVER, CO 80231 PYROTECNICS ASSEMBLY- DEPLOYABLE FLY INCIDENT DOOR DOOR PART NO. 52192 DATE: 11/17/94
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COMPANY PROPRIETARY
SHIPPING CLASSIFICATION ENGINEERING WORKSHEET

1. COMMENTS TO EXPLOSIVE WEIGHT COMPUTATION:

Calculation based on cord length of Witches

2. SIMILAR PART NUMBERS, PRODUCTS AND CLASSIFICATION ANALYSIS:

PN 52027-1,
Classification needs to be on both ET and
Customer part number

3. ARE THESE ITEMS DESIGNED AND PACKAGED SO THAT THEY WILL NOT
FUNCTION OTHER ITEMS SYMPATHETICALLY AND WILL PROHIBIT CROSS
PROPAGATION?:

Yes, Packaging will be identical to
PN 52027-1 assembly

Engineering

[Signature]
(signature)

Date

11/24/93



**- COMPANY PROPRIETARY
REQUEST FOR SHIPPING CLASSIFICATION**

TO BE COMPLETED BY ENGINEERING

REQUESTOR Loone DATE 11/24/93 SALES ORDER NO. 11765

TOP ASSEMBLY PART NAME Pyrotechnics Assembly

TOP ASSEMBLY ET PART NO. 52192

TOP ASSEMBLY CUSTOMER PART NO. 74A342621-1001
(Enter NA if not applicable)

MILITARY APPLICATION YES NO

NOTE 1: THIS FORM IS TO BE USED FOR ONE TOP ASSEMBLY ONLY, HOWEVER, MORE THAN ONE DASH NUMBER MAY BE INCLUDED IF THE EXPLOSIVE WEIGHTS ARE IDENTICAL.

NOTE 2: TWO COPIES OF THE TOP ASSEMBLY DRAWING, EXPLOSIVE SUBASSEMBLIES AND ALL EXPLOSIVE COMPONENT DRAWINGS MUST BE ATTACHED TO THIS REQUEST.

COMPONENT PART NO.	EXPLOSIVE TYPE	EXPLOSIVE WEIGHT PER UNIT*	TIMES	UNITS PER ASSEMBLY**	WEIGHT IN GRAMS
<u>40995-1-070</u>	<u>PBXNS</u>	<u>2.592/ft.</u>	<u>X</u>	<u>5.83 ft.</u>	<u>15.12</u>
<u>Part of PN 5225-1</u>			<u>X</u>	-	
			<u>X</u>	-	
			<u>X</u>	-	
			<u>X</u>	-	
			<u>X</u>	-	

Explosive weight identical to ET PN 52027-1, Complete Engineering Worksheet, Form ET-1277-1. **TOTAL EXPLOSIVE WEIGHT** 15.12g

TO BE COMPLETED BY SHIPPING/RECEIVING SUPERVISOR. DATE: 11-29-93 ON THE FOLLOWING BASIS, WE RECOMMEND CLASSIFICATION OF THIS PRODUCT AS UN 0367 1.4 S. BASIS: SIMILAR TO ET P/N 52027, CLASSIFIED AS UN0367 BY COMPETENT AUTHORITY 900948 ATTACH ADDITIONAL SHEETS IF NECESSARY. (signature) [Signature]

*For Cord products, indicate explosive weight per unit in gram per foot (g/R), by converting from grains per foot (gr/ft) as follows: 40 gr/ft x 0.0648 = 2.592 g/R.

**For TLX products, indicate the longest and shortest lengths (use a separate line for each entry).



ASSOCIATION
OF AMERICAN
RAILROADS

W.S. Chang, Director
Hazardous Materials Control

6-2-1
April 4, 1994
WSC/tc

A-9405017

Mr. A. T. Holzman
Material Manager
ET, Inc.
P. O. Box KK
Fairfield, CA 94533-0659

Dear Mr. Holzman:

The devices described in your letters of December 9, 1993, March 25, 1994 and attached drawing # 52192 is properly described as Charges, Shaped, Flexible, Linear (UN number: 0237) and classified as Explosive 1.4D in accordance with Sections 172.101, 173.59 of the DOT Hazardous Materials Regulations.

Required packaging and labelling for surface transportation (rail and highway) may be found in sections as follows:

- A. Packaging -- Section 173.62
- B. Marking -- Section 172.300
- C. Labelling -- Section 172.411, Explosive 1.4 Label

Section 173.56 requires that except for shipments of sample quantities, a written notification of the classification and approval accompanied by a supporting laboratory report or equivalent data must be filed with the Department of of Transportation before any new explosive device is offered for shipment.

If we may be of further service, please advise.

Very truly yours,

~~W.S. Chang~~

W. S. Chang
Director

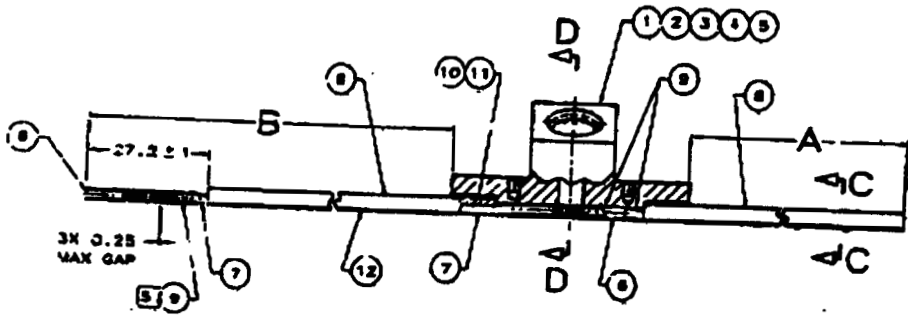
* It is also recommended to classify this device as Flexible Linear Shaped Charge, Metal Clad / Class C Explosive under the old CFR 49.

NOTES:

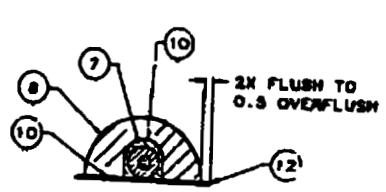
1. IDENTIFIED PER ET STANDARD 4.2.1-1. COOP D OR H.
2. MANUFACTURED PER 1:768(O1)MP.
3. ACCEPTANCE TESTED PER 1:768(O1)ATP.
4. FIND NO. 13 IS FOR SHIPPING AND HANDLING PURPOSES ONLY.
5. FIND NO. 7 BONDED INTO FIND NO. 8 USING FIND NO. 9.

REV. 52216

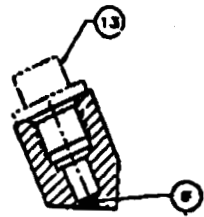
APR 15 1994
REFERENCE COPY
 WILL NOT BE UPDATED



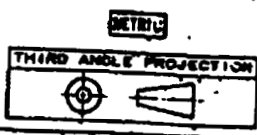
TABULATION				
PART NO.	A	B	DESCRIPTION	LOCATION
92216-1	2826 ± 25	1024 ± 25	PILOT	LEFTSIDE
92216-2	3360 ± 25	149 ± 25	PILOT	RIGHTSIDE
52216-3	1655 ± 25	2561 ± 25	CO-PILOT	LEFTSIDE
52216-4	3105 ± 25	1216 ± 25	CO-PILOT	RIGHTSIDE
52216-51	154 ± 7	332 ± 7	LAT SPECIMEN	N/A



SECTION C-C
 SCALE: 5/1



SECTION D-D



1	1	1	1	1	60170-2	PLUG, SHIPPING	13
AR	AR	AR	AR	AR	25428-4	TAPE, POLYESTER, ACCEPTED	12
AR	AR	AR	AR	AR	60224-2	PRIMER, ADHESIVE, DC 1300 (CLEAR)	11
AR	AR	AR	AR	AR	40178-1	ADHESIVE, SILICONE, DC 3145	10
AR	AR	AR	AR	AR	60173-1	ADHESIVE, 2216 B/A	9
AR	AR	AR	AR	AR	25858-1	CHARGE HOLDER, SL-2.25-X	8
AR	AR	AR	AR	AR	40640-1	X-CORD, SL-2.25-X	7
1	2	2	2	2	22336-2	SLEEVE, BOOSTER - LOADED	6
					25861-51	INITIATION BLOCK	5
	1				25861-4	INITIATION BLOCK	4
		1			25861-3	INITIATION BLOCK	3
			1		25861-2	INITIATION BLOCK	2
				1	25861-1	INITIATION BLOCK	1

52216-1-C-ADD
 0176810
 52216
 CANOPY SEVERANCE ASSEMBLY
 ET, INC
 A DIVISION OF SP, INC
 17000 S. 10TH AVE
 TUCSON, AZ 85711



COMPANY PROPRIETARY
SHIPPING CLASSIFICATION ENGINEERING WORKSHEET

1. COMMENTS TO EXPLOSIVE WEIGHT COMPUTATION: none

2. SIMILAR PART NUMBERS, PRODUCTS AND CLASSIFICATION ANALYSIS:
51300, 51309, 51390, 51391

3. ARE THESE ITEMS DESIGNED AND PACKAGED SO THAT THEY WILL NOT
FUNCTION OTHER ITEMS SYMPATHETICALLY AND WILL PROHIBIT CROSS
PROPAGATION?: YES

Engineering [Signature]
(signature)

Date 2/19/99

Form ET-1277-1

ET, Inc.
A SUBSIDIARY OF OEA, INC

P. O. BOX KK, FAIRFIELD, CALIFORNIA 94533
Telephone (707) 422-1800 • FAX (707) 422-3242



**COMPANY PROPRIETARY
REQUEST FOR SHIPPING CLASSIFICATION**

TO BE COMPLETED BY ENGINEERING

REQUESTOR C. Green DATE 2/9/94 SALES ORDER NO. 11766

TOP ASSEMBLY PART NAME CANNOT SEVERANCE ASSEMBLY

TOP ASSEMBLY ET PART NO. 52216

TOP ASSEMBLY CUSTOMER PART NO. 02005-20003-103
(Enter NA if not applicable)

MILITARY APPLICATION YES X NO

NOTE 1: THIS FORM IS TO BE USED FOR ONE TOP ASSEMBLY ONLY, HOWEVER, MORE THAN ONE DASH NUMBER MAY BE INCLUDED IF THE EXPLOSIVE WEIGHTS ARE IDENTICAL.

NOTE 2: TWO COPIES OF THE TOP ASSEMBLY DRAWING, EXPLOSIVE SUBASSEMBLIES AND ALL EXPLOSIVE COMPONENT DRAWINGS MUST BE ATTACHED TO THIS REQUEST.

COMPONENT PART NO.	EXPLOSIVE TYPE	EXPLOSIVE WEIGHT PER UNIT*	TIMES	UNITS PER ASSEMBLY**	=	WEIGHT IN GRAMS
22336-2	HNS IA	.045	X	2	=	0.090
40640-1	HNS IIA	.146	X	14.4	=	2.102
			X		=	
			X		=	
			X		=	
			X		=	

MAX. TOTAL EXPLOSIVE WEIGHT 2.192 LONGEST LENGTH (-4)

Complete Engineering Worksheet, Form ET-1277-1.

TO BE COMPLETED BY SHIPPING/RECEIVING SUPERVISOR. DATE: 3-18-94 ON THE FOLLOWING BASIS, WE RECOMMEND CLASSIFICATION OF THIS PRODUCT AS UN0367, 1.4 S.
BASIS: SIMILAR TO ET P/N 51387 CLASSIFIED AS UN0367 OR COMPETENT AUTHORITY 870518
ATTACH ADDITIONAL SHEETS IF NECESSARY. (signature) [Signature]

*For Cord products, indicate explosive weight per unit in gram per foot (g/ft), by converting from grains per foot (gr/ft) as follows: 2.25 gr/ft x 0.0648 = .146 g/ft.

**For TLX products, indicate the longest and shortest lengths (use a separate line for each entry).

Form ET-1277C

ET, Inc.
A SUBSIDIARY OF OEA, INC

P. O. BOX 88, FAIRFIELD, CALIFORNIA 94533
Telephone (707) 422-1000 • FAX (707) 422-3242



ASSOCIATION OF AMERICAN RAILROADS

W.S. Chang, Director
Hazardous Materials Control

Mr. A. T. Holzman
Material Manager
ET, Inc.
P. O. Box KK
Fairfield, CA 94533-0659

6-2-1
April 1, 1994
WSC/te

E-9405016
52216

Dear Mr. Holzman:

The device described in your letters of December 9, 1993, March 25, 1994 and attached drawing # 52216-1, -601, -603, -605, -607, -609, -611, -613, -615 * is properly described as Fuzes, Detonating (UN numbers 0257) and classified as Explosive 1.4B in accordance with Sections 172.101, 173.59 of the DOT Hazardous Materials Regulations.

Required packaging and labelling for surface transportation (rail and highway) may be found in sections as follows:

- A. Packaging -- Section 173.62
- B. Marking -- Section 172.300
- C. Labelling -- Section 172.411, Explosive 1.4 Label

Section 173.56 requires that except for shipments of sample quantities, a written notification of the classification and approval accompanied by a supporting laboratory report or equivalent data must be filed with the Department of Transportation before any new explosive device is offered for shipment.

If we may be of further service, please advise.

Very truly yours,

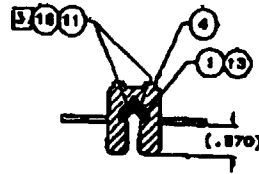

W. S. Chang
Director

It is also recommended to classified this device as Detonating Fuse, Class C / Class C Explosive under the old CFR 49.

NOTES:

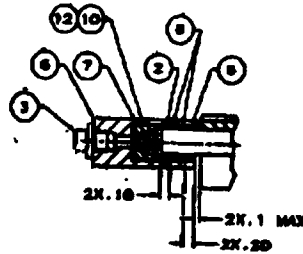
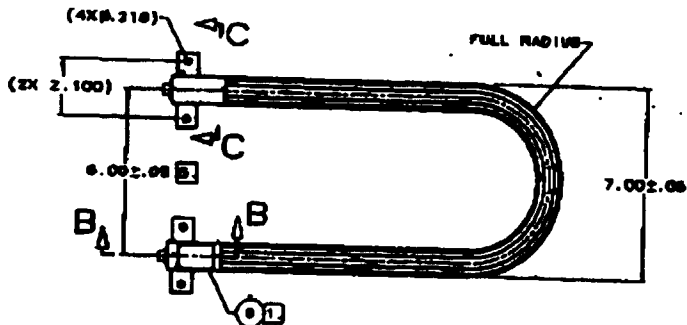
1. REQUIRED INFORMATION TYPED ON FIND NO. 9 AND ATTACHED IN AREA SHOWN.
2. -1 ASSEMBLY MANUFACTURED PER 11880(01)MP.
3. FIND NO. 1 OR 13 BONDED TO FIND NO. 4 USING FIND NO. 11 AND 12.
4. -1 ASSEMBLY ACCEPTANCE TESTED PER 11880(01)ATP.
5. DIMENSIONS NOTED MEASURED WITH ASSEMBLY IN THE RESTRAINED POSITION.
6. -2 ASSEMBLY MANUFACTURED PER 11880(02)MP.

REV	DATE	BY	APP
1			



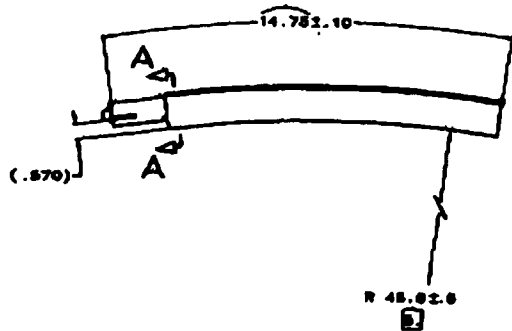
SECTION A-A
LIVE ASSEMBLY SHOWN
SCALE: 1/1

REFERENCE COPY
WILL NOT BE UPDATED
APR 18 1994



SECTION B-B
LIVE ASSEMBLY SHOWN
SCALE: 1/1

TABULATION		
ET PART NO.	UNITED TECHNOLOGIES CORP. CASE CODE 14134, PART NO.	DESCRIPTION
52214-1	FW-30130-101	LIVE
52214-2	FW-30130-102	INERT



SECTION C-C
LIVE ASSEMBLY SHOWN
SCALE: 1/1

AR	AR	60225-1	PRIMER, ADHESIVE, SS4004	16
AR		60303-1	PRIMER, ADHESIVE, S-11	18
AR		80182-1	RUBBER, RTV SILICONE	14
1		48703-2-037	JETCORD, 1A-300-J (INERT)	13
2		23054-2	ACCEPTOR CHARGE (INERT)	12
AR	AR	80171-1	ADHESIVE, SILICONE, RTV 162	11
	2	23084-1	ACCEPTOR CHARGE	10
1	1	23086-2	NAMEPLATE	9
AR	AR	80174-1	ADHESIVE, EPOXY, C-7/W	8
2	2	23083-1	ACCEPTOR CUP	7
AR	AR	80181-1	ADHESIVE, CONDUCTIVE, S6C/D	6
2	2	23081-3	INITIATION BLOCK	5
1	1	23188-3	CHARGE HOLDER	4
2	2	80170-1	PLUG, SHIPPING (S/S)	3
1	1	52214-51	BUSHING	2
1	1	48703-1-037	JETCORD, 1A-300-J	1

PART NO. 52214-1
 TITLE MOTOR CASE CUTTER
 DATE 1/17/80
 DRAWN BY [Signature]
 CHECKED BY [Signature]
 APPROVED BY [Signature]
 ET, INC. A Subsidiary of GE, INC.
 52214-1
 017830



- COMPANY PROPRIETARY
SHIPPING CLASSIFICATION ENGINEERING WORKSHEET

1. COMMENTS TO EXPLOSIVE WEIGHT COMPUTATION:

MAXIMUM EXPLOSIVE WEIGHT COMPUTED, MINIMUM EXPLOSIVE WEIGHT = 52.10 G.

2. SIMILAR PART NUMBERS, PRODUCTS AND CLASSIFICATION ANALYSIS:

52214-1 EXACTLY THE SAME AS 51182-1 (CA-870124)
1.12

3. ARE THESE ITEMS DESIGNED AND PACKAGED SO THAT THEY WILL NOT FUNCTION OTHER ITEMS SYMPATHETICALLY AND WILL PROHIBIT CROSS PROPAGATION?:

YES.

Engineering

[Handwritten Signature]
(signature)

Date



**- COMPANY PROPRIETARY
REQUEST FOR SHIPPING CLASSIFICATION**

TO BE COMPLETED BY ENGINEERING

REQUESTOR L. N. SMITH DATE 3/25/94 SALES ORDER NO. 11880

TOP ASSEMBLY PART NAME MOTOR CASE CUTTER

TOP ASSEMBLY ET PART NO. 52214

TOP ASSEMBLY CUSTOMER PART NO. BW-20130-102
(Enter NA if not applicable)

MILITARY APPLICATION YES NO

NOTE 1: THIS FORM IS TO BE USED FOR ONE TOP ASSEMBLY ONLY, HOWEVER, MORE THAN ONE DASH NUMBER MAY BE INCLUDED IF THE EXPLOSIVE WEIGHTS ARE IDENTICAL.

NOTE 2: TWO COPIES OF THE TOP ASSEMBLY DRAWING, EXPLOSIVE SUBASSEMBLIES AND ALL EXPLOSIVE COMPONENT DRAWINGS MUST BE ATTACHED TO THIS REQUEST.

COMPONENT PART NO.	EXPLOSIVE TYPE	EXPLOSIVE WEIGHT PER UNIT*	TIMES	UNITS PER ASSEMBLY**	WEIGHT IN GRAMS
23054-1	HNSF	1.75	X	2	3.50
40703-1	(HA-300-J) HMX	23.328 g/ft	X	2 2.5 ft	58.32
			X		
			X		
			X		
			X		
TOTAL EXPLOSIVE WEIGHT					<u>61.82</u>

Complete Engineering Worksheet, Form ET-1277-1.

TO BE COMPLETED BY SHIPPING/RECEIVING SUPERVISOR. DATE: 3-18-94 ON THE FOLLOWING BASIS, WE RECOMMEND CLASSIFICATION OF THIS PRODUCT AS UN 0288, I.I.D. BASIS: IDENTICAL TO ET P/N 51182 CLASSIFIED AS UN 0188, ON COMPETENT AUTHORITY 870124. ATTACH ADDITIONAL SHEETS IF NECESSARY. (signature) [Signature]

*For Cord products, indicate explosive weight per unit in gram per foot (g/ft), by converting from grains per foot (gr/ft) as follows: 360 gr/ft x 0.0648 = 23.328 g/ft.

**For TLX products, indicate the longest and shortest lengths (use a separate line for each entry).



ASSOCIATION OF AMERICAN RAILROADS

W.S. Chang, Director
Hazardous Materials Control

6-2-1
April 1, 1994
WGC/bc

Mr. A. T. Holzman
Material Manager
ET, Inc.
P. O. Box KK
Fairfield, CA 94533-0659

AF-9405015

52214

Dear Mr. Holzman:

The device described in your letters of January 24, March 25, 1994 and attached drawing # 52214-22, -23, -25, -27, -28, -29, -30, -31, -32, -33, -34, -35, -37 * are properly described as Fuzes, Detonating (UN number 0410) and classified as Explosive 1.4D in accordance with Sections 172.101, 173.59 of the DOT Hazardous Materials Regulations.

Required packaging and labelling for surface transportation (rail and highway) may be found in sections as follows:

- A. Packaging -- Section 173.52
- B. Marking -- Section 172.300
- C. Labelling -- Section 172.411, Explosive 1.4 Label

Section 173.56 requires that except for shipments of sample quantities, a written notification of the classification and approval accompanied by a supporting laboratory report or equivalent data must be filed with the Department of of Transportation before any new explosive device is offered for shipment.

If we may be of further service, please advise.

Very truly yours,

W. S. Chang
Director

* It is also recommended to classified this device as Detonating Fuze, Class C Class C Explosive under the old CFR 49.



ET, INC.

A SUBSIDIARY OF



POST OFFICE BOX KK • FAIRFIELD, CA 94533-0688
TELEPHONE (707) 422-1880 • FAX (707) 422-3242

LF-9405015-018

15 April 1994
4ATH-16020

RECEIVED
MAY -2 1994

U. S. Department of Transportation
Research and Special Programs Administration
400 Seventh Street, S.W.
Washington, DC 20590-0001

Attention: Mrs. Carol Monroe

4

Dear Mrs. Monroe:

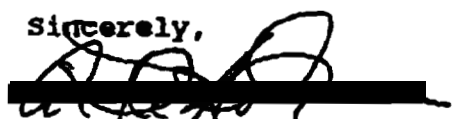
EXPLOSIVE CLASSIFICATION APPROVAL

Please review the enclosed recommendations from the Bureau of Explosives and issue the Explosive Classification approvals:

1. 52214 Fuzes, Detonating.
2. 52216 Fuzes, Detonating.
3. 52192 Charges, Shaped, Flexible, Linear.
4. 52218 Charges, Shaped, Flexible, Linear.

The complete data packages are enclosed for your review.

Sincerely,


A. T. Holzman
Material Manager

me

- cc: R. D. Curley, ET
L. W. Smith, ET (S.O. #11880)
C. A. Green, ET (S.O. #11766)
N. T. Loone, ET (S.O. #11765)
G. A. Nistler, ET (S.O. #11820)

* • COMPANY CONFIDENTIAL • *

EX-9405015-018

Subject ACTION: New Explosive Classification Requests
(Sections 173.56, 49 CFR)

From: Chief, Approvals Branch, DM-32

To: Chief, Sciences Branch, DM-21

Please indicate your recommended action of the following:

 C. Ke *5/5/94*
 ----- APPROVE
 ----- DO NOT APPROVE
 ----- REFERENCE NO.
 _____ NOT AN APPROVAL FUNCTION

REFERENCE NO.	COMPANY	PRODUCT	UN NUMBER/NAME	HAZARD CLASS
EX-9405015	ET, Inc. (formerly Explosive Technology, Inc.)	52214	UN0410, Fuzes, detonating	1.4D
	DOT Shipping Name: Detonating fuze, Class C DOT Class: C explosive			
EX-9405016	ET, Inc. (formerly Explosive Technology, Inc.)	52216	UN0257, Fuzes, detonating	1.4B
	DOT Shipping Name: Detonating fuze, Class C DOT Class: C explosive			
EX-9405017	ET, Inc. (formerly Explosive Technology, Inc.)	52192	UN0237, Charges, shaped, flexible, linear	1.4D
	DOT Shipping Name: Flexible linear shaped charge, metal clad DOT Class: C explosive			
EX-9405018	ET, Inc. (formerly Explosive Technology, Inc.)	52218	UN0208, Charges, shaped, flexible, linear	1.1D
	DOT Shipping Name: Detonating fuze DOT Class: A explosive			



U.S. Department of Transportation
Research and Special Programs Administration

Copy

400 Seventh Street, S.W.
Washington, D.C. 20590

The US Department of Transportation
Competent Authority for the United States

CLASSIFICATION OF EXPLOSIVES

Based upon a request by A.T. Holzman on behalf of ET, Inc. (formerly Explosive Technology, Inc.), P.O. Box KK, Fairfield, California, the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations (49 CFR).

U.N. PROPER SHIPPING NAME AND NUMBER:

Charges, shaped, flexible, linear, UN0237

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER

PRODUCT DESIGNATION/PART NUMBER

EX-9405017

52192

*** The following is provided to facilitate transition to the UN system ***

Classification under Sections 173.86 or 173.114a (49 CFR):

DOT DESCRIPTION/COMMERCIAL NAME: Flexible linear shaped charge, metal clad

DOT HAZARD CLASSIFICATION: Class C explosive

U.N. PROPER SHIPPING NAME AND NUMBER:

Charges, shaped, flexible, linear, UN0288

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER

PRODUCT DESIGNATION/PART NUMBER

EX-9405018

52218

*** The following is provided to facilitate transition to the UN system ***

Classification under Sections 173.86 or 173.114a (49 CFR):

DOT DESCRIPTION/COMMERCIAL NAME: Detonating fuze

DOT HAZARD CLASSIFICATION: Class A explosive

Holzman, ET, Inc. (formerly Explosive Technology, Inc.)

PAGE 2

U.M. PROPER SHIPPING NAME AND NUMBER: Fuzes, detonating, UN0257

U.M. CLASSIFICATION CODE: 1.4B

<u>REFERENCE NUMBER</u>	<u>PRODUCT DESIGNATION/PART NUMBER</u>
EX-9405016	52216

*** The following is provided to facilitate transition to the UN system ***

Classification under Sections 173.86 or 173.114a (49 CFR):

DOT DESCRIPTION/COMMERCIAL NAME: Detonating fuze, Class C

DOT HAZARD CLASSIFICATION: Class C explosive

Approved by:

Robert A. McGuire
Acting Associate Administrator for
Hazardous Materials Safety

(DATE)