

25X1

F. u. [redacted]
Destruction

[redacted]

25X1
25X1

July 29, 1958

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~~SECRET~~

[redacted]

Rec'd EP
8/5/58
7:00

25X1

Subject: Contract 112, Task Order III

Gentlemen:

The primary objective of this task order was to develop a cylindrical explosive container which, upon command, would destroy a roll of film material supplied by others.

This device was made from vulcanized fibre tubing with an inner liner of paper tubing containing the [redacted]. The fibre tubing was slotted (.406) and the paper tubing cut to length and crimped on one end. [redacted] were formed, inserted in the tube, the tube crimped and glued within the outside fibre container. The assembly of the container tube and pellets are shown on our drawing DDB-221.

25X1

25X1

Dummy sticks were forwarded to you and, as directed by you, to others.

Some difficulty was experienced with getting the [redacted] several different ideas were tried and, finally, it was found that the thin bottom cup originally contemplated was a disadvantage and the regular round bottom cup was satisfactory.

25X1

Shipments were made as follows:

- 390 long end caps were shipped 6-27-58
- 75 [redacted] were shipped 6-27-58
- 6 dummy sticks were shipped 6-25-58
- 1570 short end caps were shipped 3-26-58

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Five spools were fired satisfactorily. Picture, test sheets and drawing are attached.

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DOC	38	REV DATE	03/7/80	BY	010956
ORIG COMP	OSB	GPI	52	TYPE	01
ORIG CLASS	5	FIGS	22	REV CLASS	6
JUST	22	NEXT REV	2010	AUTH	HR 18-2

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As all shipments and work have been concluded on this task, we consider this task closed and complete pending a change in scope of work.

Final billing under this task will be made within the month.

Very truly yours



25X1

WHR:kd
Encls.

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TYPE DETONATOR

Date Tested 4-16-58

TYPE OF TEST AND COMMENTS: Safeguard

SECRET

Sheet 4
see back

TEST RESULTS

NO.	OHMS	VOLTS	μ F	ERGS	RESULTS μ s.	NO.	OHMS	VOLTS	μ F	ERGS	RESULTS μ s.
1						26					
2						27					
3						28					
4						29					
5						30					
6						31					
7						32					
8						33					
9						34					
10						35					
11						36					
12						37					
13						38					
14						39					
15						40					
16						41					
17						42					
18						43					
19						44					
20						45					
21						46					
22						47					
23						48					
24						49					

25X1

TYPE DETONATOR: 2.390 END CAPS
PLUG ASSEMBLY:

Date **SECRET 4-16-58**

1. Preparation
Using
in Bottom of cup.

25X1

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>	<u>TIME</u>
2. Microscope Inspection:	_____	_____	_____	_____
3. 325-V DC Test:	_____	_____	_____	_____
4. Bridging:	_____	_____	_____	_____
5. Final Micro Inspection:	_____	_____	_____	_____

EXPLOSIVE HISTORY:

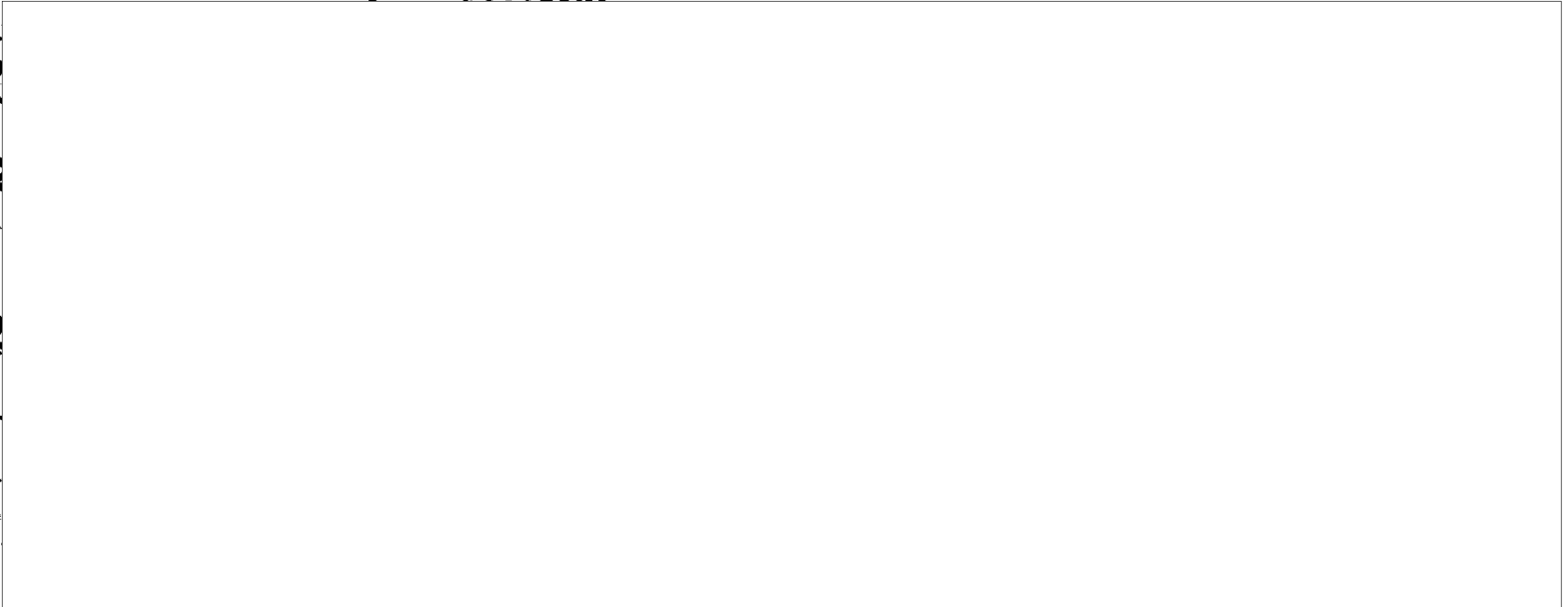
1. Ignition Drop: Date: _____ Time: _____

2. Base Chg.: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 3. Priming Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 4. _____ Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 5. Insertion Pressure: _____ lbs. Date: _____ Time: _____

FINAL ASSEMBLY:

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>
1. Crimping:	_____	_____	_____
2. Gauging:	_____	_____	_____
3. Final Resistance:	_____	_____	_____
4. Insulation Resistance Test:	_____	_____	_____
5. Final Assembly Inspection:	_____	_____	_____

25X1



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TYPE DETONATOR

Date Tested

4/15/58

TYPE OF TEST AND COMMENTS:

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[Redacted]

sheet 1

2 units fired low order

1 unit with no air gap fired high order

conclusion:

[Redacted]

in end caps

25X1

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2390 END-CAPS

Date: 4-16-58

25X1

ASSEMBLY:

1. Preparation of Components
Using

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	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>	<u>TIME</u>
1. Microscope Inspection:	_____	_____	_____	_____
2. 325-V. DC. Test:	_____	_____	_____	_____
3. Bridging:	_____	_____	_____	_____
4. Final Micro Inspection:	_____	_____	_____	_____

EXPLOSIVE HISTORY:

1. Ignition Drop: _____ Date: _____ Time: _____

2. Base Chg.: Type _____, Wt. _____ mg, Pin Press _____ lbs.
3. Priming Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
4. _____ Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
5. Insertion Pressure: _____ lbs. Date: _____ Time: _____

FINAL ASSEMBLY:

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>
1. Crimping:	_____	_____	_____
2. Gauging:	_____	_____	_____
3. Final Resistance:	_____	_____	_____
4. Insulation Resistance Test:	_____	_____	_____
5. Final Assembly Inspection:	_____	_____	_____

INITIATORS TO BE USED FOR:

25X1

CONCLUSIONS:

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25X1

TYPE

Date tested

7-7-58

TYPE OF TEST AND COMMENTS: Sateguard Units

SECRET

25X1

Sheet 6

TEST RESULTS

(gilding metal)
substituted #6 fuse caps for end cups
assembled same as before except no flange
on cup so had to gage $\frac{1}{8}$ " gap by hand

- (1) high order
- (2) high order
- (3) high order
- (4) high order

(5) high order

Kandy to load end cups as
per fuse cap loading method

SECRET

TYPE OF TEST AND COMMENTS

safe guard circuits

SECRET

(see back)

sheet # 7

TEST RESULTS

NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.	NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.
1					1 - failed to set off	26					
2						27					
3					tried fuse cap set at approx 1/8" from other end of high order	29					
4						30					
5						31					
6						32					
8					we still dont have the heavy bottom on fuse cap try heavy bottom	35					
10						36					
11						37					
12						38					
13						39					
14						40					
15						41					
16						42					
17						43					
18						44					
19						45					
20						46					
21						47					
22						48					
23						49					
24						50					

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25X1

TYPE

2390 End Cap

Date:

SECRET

PLUS ASSEMBLY:

1. Preparation Comments:

[Empty rectangular box for preparation comments]

25X1

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>	<u>TIME</u>
2. Microscope Inspection:	_____	_____	_____	_____
3. 325-V DC Test:	_____	_____	_____	_____
4. Bridging:	_____	_____	_____	_____
5. Final Micro Inspection:	_____	_____	_____	_____

EXPLOSIVE HISTORY:

1. Ignition Drop: Date: _____ Time: _____

2. Base Chg.: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 3. Priming Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 4. _____ Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.
 5. Insertion Pressure: _____ lbs. Date: _____ Time: _____

FINAL ASSEMBLY:

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>
1. Crimping:	_____	_____	_____
2. Gauging:	_____	_____	_____
3. Final Resistance:	_____	_____	_____
4. Insulation Resistance Test:	_____	_____	_____
5. Final Assembly Inspection:	_____	_____	_____

DETONATORS TO BE USED FOR:

CONCLUSIONS:

SECRET

OF TEST AND COMPARISONS

(see back)

sheet 8

SECRET

TEST RESULTS

NO.	OHMS	VOLTS	μ F	ERGS	RESULTS μ s.	NO.	OHMS	VOLTS	μ F	ERGS	RESULTS μ s.	
1		high order				25						
2		high order				27						
3						28						
4						29						
5		8 more made - tested with partial					30					
6										31		
7	Friday PM					32						
8						33						
9						34						
10		difference and (bly) - all went high										
11		order				36						
12						37						
13		Total of 10 now tested this way					38					
14											39	
15						40						
16						41						
17						42						
18						43						
19						44						
20						45						
21						46						
22						47						
23						48						
24						49						

SECRET

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TYPE R.390 End Caps

Date: 1-10-58

SECRET

25X1

PLUG ASSEMBLY:

1. Preparation Comments:

[Empty box for preparation comments]

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>	<u>TIME</u>
2. Microscope Inspection:	_____	_____	_____	_____
3. 325-V DC Test:	_____	_____	_____	_____
4. Bridging:	_____	_____	_____	_____
5. Final Micro Inspection:	_____	_____	_____	_____

EXPLOSIVE HISTORY:

1. Ignition Drop: _____ Date: _____ Time: _____

2. Base Chg.: Type _____, Wt. _____ mg, Pin Press _____ lbs.

3. Priming Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.

4. _____ Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.

5. Insertion Pressure: _____ lbs. Date: _____ Time: _____

FINAL ASSEMBLY:

	<u>NUMBER</u>	<u>REJECTS</u>	<u>BALANCE</u>
1. Crimping:	_____	_____	_____
2. Gauging:	_____	_____	_____
3. Final Resistance:	_____	_____	_____
4. Insulation Resistance Test:	_____	_____	_____
5. Final Assembly Inspection:	_____	_____	_____

DETONATORS TO BE USED FOR:

CONCLUSIONS:

SECRET

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TYPE OF TEST AND COMMENTS:

1/8" gap to

TEST RESULTS

SECRET

NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.	NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.
1						26					
2						27					
3						28					
4						29					
5						30					
6						31					
7						32					
8						33					
9						34					
10						35					
11						36					
12						37					
13						38					
14						39					
15						40					
16						41					
17						42					
18						43					
19						44					
20						45					
21						46					
22						47					
23						48					
24						49					
25						50					

SECRET

2390

TYPE DETONATOR: END CAPS

Date: 4-15-58

PLUG ASSEMBLY:

1. Preparation Comments:

Using Round Bottom cups

SECRET

in 2 increments

25X1

- 2. Microscope Inspection:
- 3. 325-V DC Test:
- 4. Bridging:
- 5. Final Micro Inspection:

NUMBER	REJECTS	BALANCE	TIME
	1		

EXPLOSIVE HISTORY:

1. Ignition Drop: _____ Date: _____ Time: _____

2. Base Chg.: Type _____, Wt. _____ mg, Pin Press _____ lbs.

3. Priming Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.

4. _____ Chg: Type _____, Wt. _____ mg, Pin Press _____ lbs.

5. Insertion Pressure: _____ lbs. Date: _____ Time: _____

FINAL ASSEMBLY:

- 1. Crimping:
- 2. Gauging:
- 3. Final Resistance:
- 4. Insulation Resistance Test:
- 5. Final Assembly Inspection:

NUMBER	REJECTS	BALANCE

IGNITORS TO BE USED FOR:

CONCLUSIONS:

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TYPE

[Redacted]

Date tested: 6-16-58

TYPE OF TEST AND COMMENTS:

ILLEGIB

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TEST RESULTS

2 units (waterproofed) soaked in
water for 4 hours.

both fired high order

SECRET

TYPE

Date _____

TYPE OF TEST AND COMMENTS:

Compatibility of

Rec

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TEST RESULTS

NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.	NO.	OHMS	VOLTS	μ f	ERGS	RESULTS μ s.
1.	---	Added	1	drop of chemical	to						
2.				no visible	reaction						
3.				with	still no visible reaction						
4.				10 min	chemical began to attack aluminum						
5.	(2)	Added	2	drops chemical	to surface of 2						
6.				and allowed to	set for 1/2 hour.						
7.				a) 1 fluid	no visible - (0.090" an gap with						
8.					T-60 detector) - High order.						
9.				b) Second	unit placed in +165°F oven						
10.					for 5 hours - 1/4" hole (high order)						
11.											
12.	(3)	Repeat of 2		1 unit	placed in 165°F oven for						
13.				127 hours	after soaking for 20 hrs at ambient.						
14.					5/16" hole (HIGH ORDER)						
15.											
16.											
17.											
18.											
19.	(4)	Two lead cups stored		of developer	for 12 days under 1/2" lead						
20.				several days.	liquid turned dark brown after						
21.					1 - 5/16" holes 2 Batts						
22.					1 - 1/4" hole } high order						
23.											
24.											
25.											
26.											
27.											
28.											
29.											
30.											
31.											
32.											
33.											
34.											
35.											
36.											
37.											
38.											
39.											
40.											
41.											
42.											
43.											
44.											
45.											
46.											
47.											
48.											
49.											
50.											

SECRET

Conclusion:
compatible
development

REF:

[Redacted box]

Date tested: 2-58

TYPE OF TEST AND COMMENTS:

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TEST RESULTS

2 units (waterproofed) soaked
in solution for 4 hours

1 high order

1 failed

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