

TEST RECORD NO: TI-SA-90	FIRING TEST RECORD (Delete one)	DATE OF RECORD: 3 Jan 68
DATE(S) OF TEST: 13 Dec 67	DEVELOPMENT AND PROOF SERVICES ABERDEEN PROVING GROUND, MARYLAND	AUTHORITY: TSMS Form AMSTE-BC, 11 Dec 67
TYPE OF TEST: USATECOM PROJECT NO. 8-8-0200-11 Special Performance Investigation of M16A1 Rifle		REQUESTING AGENCY: AMCPM-RS
		CONTRACT NO:
		WORK ORDER NO: 324-960-81

OBJECT OF TEST

To determine physical characteristics and function performance of the test item.

81-502

TEST ITEM

One 5.56-mm M16A1 rifle supplied to the U.S. Congressional (Ichord) subcommittee by the manufacturer.

TEST FACILITIES

Bore and chamber measurement instrumentation.
Michaelsville range and shop facility.
Microphonic initiated cyclic rate recorder.

TEST RECORD NO: TI-SA-90 (Continued) Use additional sheets, if required.

REMARKS

The test rifle did not exhibit any malfunctions during test firing at APG. A complete summary and discussion of test data are given in Inclosure 1.

THIS IS THE FINAL REPORT ON THIS TASK

OBSERVERS

Mr. Robert Roy - New Haven, Conn.

Franklin H. Miller

SIGNATURE:

FRANKLIN H. MILLER
Test Director

Claude E. Brown
CLAUDE E. BROWN

Ch, Infantry & Aircraft Weapons Division
Development and Proof Services

DISTRIBUTION:

CGUSATECOM, ATTN: AMSTE-TA and AMSTE-BC (2 cys)
Technical Library, APG, Md (Orig)

This test record signifies that the requested testing has been completed. It does not constitute approval or disapproval of the test item by Aberdeen Proving Ground.



DEPARTMENT OF THE ARMY
ABERDEEN PROVING GROUND FMiller/ps/895-3350/3136
ABERDEEN PROVING GROUND, MARYLAND 21005

9 JAN 1968

STEAP-DS-TI

SUBJECT: Letter Report of Special Performance Investigation of
M16A1 Rifle, RDT&E Project No. Not Available, USATECOM
Project No. 8-8-0200-11

TO: Commanding General
U. S. Army Weapons Command
ATTN: AMCPM-RS
Rock Island, Illinois 61201

1. REFERENCES:

- a. Work Directive, 4 Dec 1967, from AMCPM-RS to STEAP-CO-P.
- b. TSMS from AMSTE-BC, 11 Dec 1967.

2. BACKGROUND:

The Project Manager - Rifles requested that Aberdeen Proving Ground (APG) provide M16A1 rifles for a Congressional (Ichord) Subcommittee demonstration at the U.S. Air Force firing range in Lorton, Virginia on 22 November 1967. Specifically, APG was requested to provide five M16A1 rifles with chrome-plated chambers, redesigned buffers, and phosphate coated bolt and carrier groups; also, two other rifles were requested similar to the above except that non-plated chambers and the earlier standard buffer were to be included. Generally satisfactory results were obtained with the weapons furnished by APG; however, an M16A1 rifle furnished by the Ichord Subcommittee developed feeding stoppages during the firings. Subsequently, APG was requested to conduct an examination and test firing of the rifle. The firing was accomplished on 13 Dec. 1967 in the presence of Mr. Robert Roy, a representative of the rifle manufacturer. The results of the examination and firing are reported herein.

3. OBJECTIVE:

The objective of this test was to thoroughly inspect, test fire, and analyze firing data to determine weapon performance characteristics and the cause of any malfunctions encountered.

SUBJECT: Letter Report of Special Performance Investigation of
M16A1 Rifle, RDT&E Project No. Not Available, USATECOM
Project No. 8-8-0200-11

4. SUMMARY OF RESULTS:

a. Inspection - Upon receipt of the weapon at APG visual inspection was performed. It was noted that the weapon had previously been cleaned of all fouling and foreign matter which had been present immediately following the demonstration firing. Air gage measurements of the land (bore) and groove diameters were taken (Inclosure 1, Table 1). Chamber measurements were obtained from a woods-metal cast. Dimensions of the cast were found to be comparable to measurements from previously inspected test barrels. Moderate circumferential tool marks were observed in the body of the chamber.

b. Test Firing - A total of 2279 rounds of 5.56-mm ball ammunition was fired in the rifle. No maintenance was performed after the initial lubrication with MIL-L-46000A semi-fluid oil, applied as prescribed in TM9-1005-249-14, 1 August 1966. Firing was conducted in 140-round trials (seven 20-round magazines). Three modes of fire were used: automatic in 20-round bursts, automatic in 3- to 5-round bursts, and semiautomatic. Partial rim shears were experienced occasionally with the RA ammunition lot used; this characteristic is believed to be attributed to the variations in case hardness, and not entirely to the surface finish of the chamber. The entire test was fired without a single malfunction or stoppage. Round-by-round data are given in Inclosure 1, Tables 1 and 2.

c. Analysis - Since no malfunctions occurred at APG in the firings with the Ichord Subcommittee rifle, the cause of the malfunctions encountered at Lorton, Virginia could not be determined. However, there are several possible causes for M16A1 rifle feeding failures and related malfunctions. Foremost is a deficiency in maintenance. This can allow rust, corrosion or fouling to build up in the chamber, bolt and carrier group, and magazines and reduce the efficiency of the system. Intermittent firing without maintenance, combined with storage involving variations of temperature and humidity, induces the aforementioned conditions. Another consideration is the magazines, which were not provided for the APG evaluation. Damage to the critical feed-lip area can cause malfunctions. It was reported by range personnel at the sub-committee demonstration that the cyclic rate of the weapon was erratic and lower than normal. This would indicate excessive fouling. The cyclic rate extremes (Inclosure 1, Table 2) for the entire APG evaluation indicate a normal fouling increase and lubricant dissipation (for 2279 consecutive rounds); these conditions had no adverse effects on functioning.

STEAP-DS-TI

2 JAN 1968

SUBJECT: Letter Report of Special Performance Investigation of
M16A1 Rifle, RDT&E Project No. Not Available, USATECOM
Project No. 8-8-0200-11

5. CONCLUSIONS:

It was concluded that the conditions under which the Ichord Sub-committee M16A1 rifle malfunctioned cannot be reproduced without a complete past history of the weapon firing trials, ammunition lots used, storage times and temperatures, and other possible factors that led to the malfunctioning experienced during the demonstration.

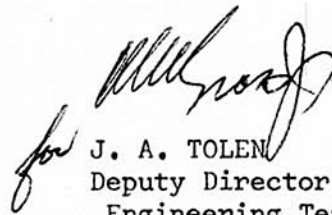
6. RECOMMENDATION:

It is recommended that no further action be taken to evaluate the function performance of the Ichord Sub-committee M16A1 rifle.

FOR THE COMMANDER:

2 Incls

1. Details of Test
2. Correspondence

for 

J. A. TOLEN
Deputy Director for
Engineering Testing
Development and Proof Services

Copy furnished:

CGUSATECOM, ATTN: AMSTE-BC (2 cys)

Table 2. Function Performance Data

<u>Trial No.</u>	<u>No. Rds Fired</u>	<u>Total No. Rds Fired</u>	^a <u>Mode of Fire</u>	<u>Avg Cyclic Rate, rds/min</u>	<u>No. Bursts</u>	<u>Remarks</u>
1	140	140	A	839	-	Amm Lot TW 18125
2	140	280	S	-	-	Amm Lot TW 18125
3	140	420	B	-	49	Amm Lot RA 5273
4	140	560	A	893	-	used in remaining firing.
5	140	700	S	-	-	
6	140	840	B	-	49	
7	140	980	A	848	-	
8	140	1120	S	-	-	
9	140	1260	B	-	49	
10 ^b	140	1400	A	769	-	
11 ^b	140	1540	A	767	-	
12 ^b	140	1680	A	763	-	
13 ^b	140	1820	A	752	-	
14 ^c	140	1960	B	-	-	
15 ^c	140	2100	B	-	-	
16	140	2240	A	766	-	
17	20	2260	S	-	-	
18	19	2279	B	-	7	

^a A - automatic, B - short bursts (3-5 rounds automatic), S - semiautomatic.

^b The rifle was forced-air cooled between trials. Ambient range temperature was 55°F. All other firings were conducted with natural air cooling duration of 2 to 5 minutes between trials.

^c A 10-second firing delay between bursts was included in the last two magazines to determine if cartridge heating affected performance.

Note: No malfunctions occurred.

Ammunition; Cartridge, 5.56-mm, ball, M193, lot TW 18125 (280 rds) and RA 5273 (1999 rds) both loaded with ball propellant.

Table 3. Cyclic Rate of Fire Data, Rds/min

Trial No.	Burst No.							Extreme Variation	Average
	1	2	3	4	5	6	7		
1	759	791	808	832	867	902	912	153	839
4	808	844	883	917	912	940	949	141	893
7	786	815	842	855	844	883	912	126	848
10	730	733	759	775	791	788	808	78	767
11	678	737	765	778	796	798	818	140	767
12	666	744	759	778	791	801	801	135	763
13	671	710	740	778	780	789	798	127	752
16	706	741	768	778	794	784	788	88	766
Extreme Variation	142	134	143	142	132	156	161		
Average	726	764	790	811	822	836	848	121	
Avg Progressive Change Increase in Cyclic Rate During Sustained Firing:									
	0	+38	+26	+21	+11	+14	+12		

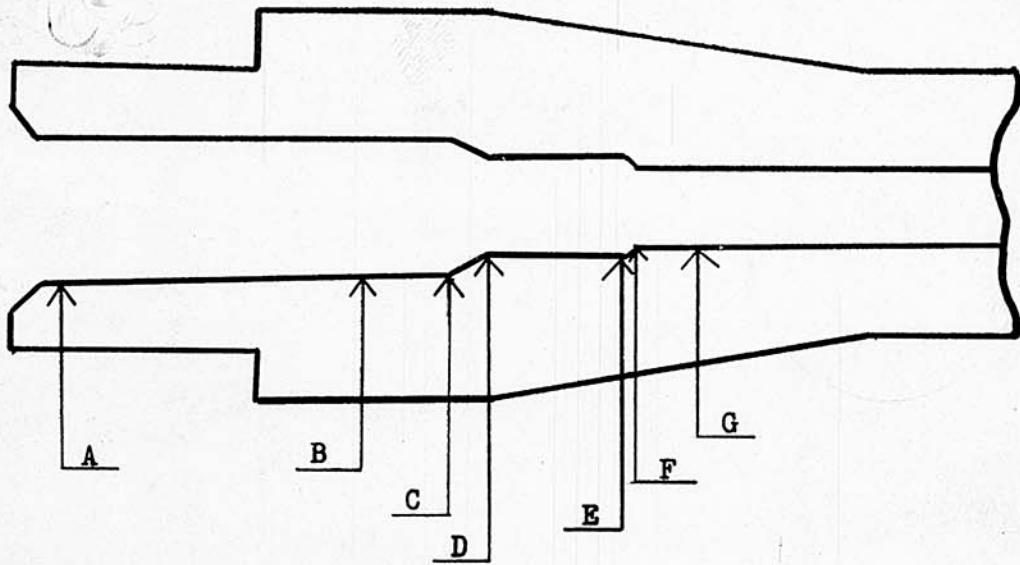


Figure 2-24. Sketch of Chamber for M16A1 Rifle and XM177E2 Submachine Gun. Letters Indicate Positions of Diameter Specifications as Shown on Standard Operation Instruction Sheet Used by the Manufacturer.

5.56 MM CAST MEAS. B.F. AVG

DISTANCE (INCHES) FROM NOMINAL BREACH FACE

.200 1.200 1.4337 ^{1.558} 1.552 ^{1.778} 1.772 1.815 2.0211

DIA. SPEC'S	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>A1</u>
	.3789	.3614	.3573	.257	.256	.2265	.220	
	<u>.3769</u>	<u>.3594</u>	<u>.3553</u>	<u>.255</u>	<u>.254</u>	<u>.2245</u>	<u>.210</u>	<u>.200</u>

NO.	A	B	C	D	E	F	G	A1
775399	.3824	.3611	.3574	.2573	.2561	.2291	.2238	.3787 DIA. .225 DIST
			(1.4319)	(1.5484)	(1.7752)	} DIST TO SHARP CORNER } DIA. AT GIVEN DIST.		
			.3570	.2695	.2560			
			(1.4310)	(1.558)	(1.768)			

BY: MONK
DATE 5 DEC. 67
W.O. 324-960-80

A1.15 The distance where the diameter for .19 falls
.330 Oatona Dia. used as Ref.

AFGR 1-10
OCSR 55-3

TRIP AND VISIT REPORT

RCS STEAP-PC-10 (APG)
RCS AISO-S-1 (OC&S)

DATE OF REPORT 18 December 1967

SUBMITTED BY:

F. H. MILLER

ORGANIZATION:

Small Arms & Aircraft Weapons Branch

REPRESENTING: *(Names of Others and their org. if a group visit)*

PLACE VISITED:

Airforce Rifle Range, Lorton, Virginia

AUTHORITY:

Verbal, DD for Engr Testing, D&PS and Chief, Engineer, I&AW Division.

DEPARTURE DATE:

21 Nov 67

RETURN DATE:

22 Nov 67

1. PURPOSE OF VISIT:

Transport weapons, ammunition and related materiel. Provide technical guidance, if required, by Congressional (U.S. Rep Ichord) Committee.

2. PERSONNEL CONTACTED:

LTC Engle, Bldg T-7, AMC, Washington, D.C.

3. DISCUSSION OR DETAILS OF VISIT:

LTC Engle of the Project Manager-Rifles Office in Washington, D.C. requested that two engineering test personnel from APG provide technical guidance and furnish demonstration materiel (M16A1 rifles) for the (U.S. Rep) Ichord Committee's presentation to the news media.

In accordance with the request, a total of 12 M16A1 rifles were provided: Five quality assurance test rifles (chrome-plated chambers, phosphate-coated bolt and carrier assemblies, and new design buffer assembly), five rifles of slightly earlier manufacture with unplated chambers, and two rifles equipped with old design buffer mechanisms. Currently manufactured 5.56-mm ball cartridges loaded with IMR and ball propellants were furnished.

(see cont sheet)

Each of the twelve rifles were functioned fired 40 rounds at APG at the request of LTC Engle, to insure satisfactory operation of the demonstration weapons. Since the condition of the rifle range and availability of related support materiel was not known, a rifle rack, shooting (safety glasses), ear protectors, targets, and other items associated with small arms demonstrations at APG were required to be transported.

The original intent of the trip was to utilize the APG personnel in the demonstration and television film being taken; however, the requirement was changed to use one enlisted man from the U.S. Army Infantry Board, Fort Benning, Ga. Firing was conducted at the U.S. Airforce range in Lorton, Va. All range supervision and support were provided by the Air Force personnel. The APG personnel were requested to remain in the background. All APG supplied weapons that were fired performed satisfactorily; however, an M16A1 rifle supplied by the manufacturer (this weapon does not belong to the Army) to the Ichord Committee did malfunction. Since the APG personnel were excluded from the immediate proximity of the range area, they could not establish the exact cause of the malfunctions encountered and photographed. Upon termination of the demonstration, Air Force range personnel were advised that they should establish the cause of malfunctions with this rifle and report their findings to the Ichord Committee. At this time (after the congressional committee and news media personnel had departed the range), LTC Engle and the APG personnel inspected the malfunctioning rifle. It was apparent from the dirty condition of the rifle, that it had not been maintained in accordance with normal procedures. The chamber contained hard deposits of fouling and there was a general appearance of lack of proper lubrication. After cleaning the chamber, firing 20 rounds, and inspecting the fired cases, it was determined that the chamber of this weapon had circumferential tool marks throughout the entire case body area. The extractor marks on the fired case rims indicated increased extraction forces.

As a direct result of this limited evaluation, it has been requested by the Project-Manager-Rifles, that a thorough inspection and analysis of function performance of the Ichord Committee rifle by conducted by APG, and that a letter report be furnished by 15 December 1967. Funding authorization has been received and the project is expected to be completed on schedule.

TO:

CY: CO, APG, ATTN:
STEAP-CO-D

FROM: *STEAPCO-P*
HEADQUARTERS
U.S. ARMY TEST & EVALUATION
COMMAND
ATTN: AMSTE -
ABERDEEN PROVING GROUND,
MARYLAND 21005

FOR THE COMMANDER:

DATE:

1-3	4-9	10-11	12-13	14-15	16-17	18-19	20	21-78	79	80	THIS IS THE TEST DIRECTIVE									
CARD TP 5	PROJECT NUMBER	TASK	SPON	TEST TYPE	EKEC AGY	TASK AGY	CAT	SEE BELOW	SP CD	SEE BELOW										
↓	<i>8-8-0200</i>	<i>11</i>				<i>K2</i>	<i>2</i>	↓		↓										
020	BLANK										BLANK									
021	<i>Rifle M16A1 - Special Performance Investigation</i>																			
022																				
023																				

CRITICAL EVENT DATA																							
1-3	21-24	25-26	27-28	29-30	31	32	(33-34)	35-87								88-89	70-71	72-73	74-75	76	77	78	80
CARD TP 3	CE NO	SCHEDULED DATE					CARD SEQ 1 - TITLE OF EVENT (35)		RPT AGY	COMPLETION DATE					AC CD	SEC CL							
		DA	MO	CY	FG	FY	CARD SEQ 2 - REMARKS REGARDING ACTION (33)			GA	MO	CY	FG	FY									
061	1200						DIRECTIVE ISSUED																
062	DUPE	BLANK								BLANK													
061	1600						ESTIMATED MANHOURS & COST																
062	DUPE	BLANK					(35)		(42)		(60)		(67)		BLANK								
061	2000						TEST ITEMS RECEIVED																
062	DUPE	BLANK								BLANK													
061	3000						TEST INITIATED																
062	DUPE	BLANK								BLANK													
061	3620						ALL TESTING COMPLETED																
062	DUPE	BLANK								BLANK													
061	4120						FINAL REPORT SUBM TO SPONSOR																
062	DUPE	BLANK								BLANK													
061	4200						TASK COMPLETED-NO REPT REQUIRED																
062	DUPE	BLANK								BLANK													
061	4600						ACTUAL MANHOURS & COST							<i>K2</i>	<i>24</i>	<i>01</i>	<i>68</i>	<i>38</i>	<i>30</i>				
062	DUPE	BLANK					(35)		(42)	<i>16</i>	(60)		(67)	<i>173</i>	BLANK					<i>30</i>			
		BLANK								BLANK													

REMARKS (Not for Key Punch):

24 JAN 1968

PROCUREMENT/WORK DIRECTIVE (AMCR 11-15)		1. TRANSMITTAL CONTROL NUMBER <i>K2 12 0003</i>	PAGE 1 OF 1 PAGES	3. PRIORITY 02
4. TO: CO ABERDEEN PROVING GROUND Aberdeen Proving Ground, Md. 21005 ATTN: STEAP-CO-P		5. <i>ALVIN C. ISAACS, Col, GS</i> Project Manager, Rifles	6. BASIC FACT CODE:	7. DATE 7338 12/4
8. FROM: PROJECT MANAGER, RIFLES, USAWECOM Rock Island, Illinois 61201 ATTN: AMCPM-RS/AMSWE-CPFG		9. AUTHORIZED BY:	10. PROJECT NO./CATEGORY CODE:	
11. CMS TITLE/ITEM NOMENCLATURE: Rifle M16A1 Comparison Test		12. CUSTOMER ORDER NUMBER: A1-6-11610-A1-45	13. PRON: 45-6-76327-(04)-45-K2	
14. AMCMS CODE: 4420.25.0132.2.127		15. ACCOUNTING CLASSIFICATION: 21X2030 666-4501 P4420 S11199		16. DATE DISP: 7338
17. QUANTITY ON ORDER:		18. TARGET DATE FOR OBLIGATION: 7353	19. LOCAL USE:	

20. QUANTITATIVE AND CHANGE DATA				
ELEMENT	U/M	QUANTITY	UNIT PRICE	TOTAL PRICE
a. PRIOR				\$29,000.00
b. TOLERANCE USED				
c. INCREASE				\$ 500.00
d. DECREASE				
e. CURRENT				\$29,500.00
f. TOLERANCE				None
21. REPORT CODE: A		22. TYPE OF FINANCING: C		

23. DESCRIPTION OF WORK AUTHORIZED/SPECIAL INSTRUCTIONS/INCLOSURES: Expiration date of this order ~~31 Dec 67~~ 31 Mar 68

This change is issued to increase program authorization in the amount shown in block 20c to cover the cost of the following scope of work on an M16A1 Rifle, Serial No. 775339, delivered to D&PS by LTC Engle, AMCPM-PMSO, 29 November 1967:

1. Inspect thoroughly
2. Measure thoroughly
3. Fire thoroughly
4. Analyze thoroughly

Before firing takes place D&PS will contact Project Manager, Rifles (AMCPM-RS) to arrange for a Colt's Inc. representative to examine the rifle and witness the firing. This work is to be completed and a letter report submitted to the Project Manager, Rifles, AMCPM-RS, Rock Island, Illinois by 15 Dec 67.

The above items and conditions are satisfactory and are accepted as a project order and will be performed as ordered herein.

Accepting Officer _____ DATE _____

24. PACKAGING, PACKING AND MARKING SHALL BE IN ACCORDANCE WITH:																	
25. DISTRIBUTION PATTERN:						BASIC FACT CODE:					STOCK NUMBER:						
a. DEPOT	DOC IDENT	RI FROM	M & S	U/I	QTY	CUST DOC NUMBER	S U F	SUPP'L ADDRESS	S I G	F A C	DIST	PROJ	PD	RDD	A D V	MGT DATA	UNIT PRICE
UNIT PACK:			INTER PACK:			CONSIGNEE:											
P & P LEVEL:			PACKING LEVEL:														
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
b. DEPOT	DOC IDENT	RI FROM	M & S	U/I	QTY	CUST DOC NUMBER	S U F	SUPP'L ADDRESS	S I G	F A C	DIST	PROJ	PD	RDD	A D V	MGT DATA	UNIT PRICE
UNIT PACK:			INTER PACK:			CONSIGNEE:											
P & P LEVEL:			PACKING LEVEL:														
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
c. DEPOT	DOC IDENT	RI FROM	M & S	U/I	QTY	CUST DOC NUMBER	S U F	SUPP'L ADDRESS	S I G	F A C	DIST	PROJ	PD	RDD	A D V	MGT DATA	UNIT PRICE
UNIT PACK:			INTER PACK:			CONSIGNEE:											
P & P LEVEL:			PACKING LEVEL:														
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
d. DEPOT	DOC IDENT	RI FROM	M & S	U/I	QTY	CUST DOC NUMBER	S U F	SUPP'L ADDRESS	S I G	F A C	DIST	PROJ	PD	RDD	A D V	MGT DATA	UNIT PRICE
UNIT PACK:			INTER PACK:			CONSIGNEE:											
P & P LEVEL:			PACKING LEVEL:														
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
e. DEPOT	DOC IDENT	RI FROM	M & S	U/I	QTY	CUST DOC NUMBER	S U F	SUPP'L ADDRESS	S I G	F A C	DIST	PROJ	PD	RDD	A D V	MGT DATA	UNIT PRICE
UNIT PACK:			INTER PACK:			CONSIGNEE:											
P & P LEVEL:			PACKING LEVEL:														
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D
Q	D			Q	D	Q	D	Q	D	Q	D	Q	D	Q	D	Q	D

CO APG ATTN: STEAP-CO-P
 CY: CO, APG, ATTN:
 STEAP-CO-D

FROM:
 HEADQUARTERS
 U.S. ARMY TEST & EVALUATION
 COMMAND
 ATTN: AMSTE- BC
 ABERDEEN PROVING GROUND,
 MARYLAND 21005

FOR THE COMMANDER:
Charles L. Crider
 GOODWIN MORROW
 Act Dir
 Inf Mat Test Dir
 DATE: 11 Dec 67

1-3	4-8	10-11	12-13	14-15	16-17	18-19	20	21-78	79	80	XX THIS IS THE TEST DIRECTIVE		
CARD TP 5	PROJECT NUMBER	TASK	SPDN	TEST TYPE	EKEC AGY	TASK AGY	CAT	SEE BELOW	SP CD	SEE BELOW			
	8-8-0200	11	45	SS		K2	2		1				
020	BLANK		4420250312212		456763270445K2		BLANK		1	U			
021	Rifle	M16A1 - Special Performance Investigation										1	U
022	Ref AMCPM-RS 1095 dtd 7338 (12/4)										1	U	
023	BLANK												

CRITICAL EVENT DATA																	
1-3	21-24	25-28	27-28	29-30	31	32	33-34	35-67	68-69	70-71	72-73	74-75	76	77	78	80	
CARD TP 3	CE NO	SCHEDULED DATE					CARD SEQ 1 - TITLE OF EVENT (35) CARD SEQ 2 - REMARKS REGARDING ACTION (33)	RPT AGY	COMPLETION DATE					AC CD	SEC CL		
		DA	MO	CY	FG	FY			DA	MO	CY	FG	FY				
061	1200						DIRECTIVE ISSUED	K1	11	12	67	2	8	3	U		
062	DUPE	BLANK							BLANK								
061	1600						ESTIMATED MANHOURS & COST	K2							1	U	
062	DUPE	BLANK					(35)		(42)		(60)				(67)	BLANK	
061	2000						TEST ITEMS RECEIVED	K2							1	U	
062	DUPE	BLANK							BLANK								
061	3000						TEST INITIATED	K2							1	U	
062	DUPE	BLANK							BLANK								
061	3620						ALL TESTING COMPLETED	K2							1	U	
062	DUPE	BLANK							BLANK								
061	4120	15	12	67	2	8	FINAL REPORT SUBM TO SPONSOR	K2							1	U	
062	DUPE	BLANK							BLANK								
061	4200						TASK COMPLETED-NO REPT REQUIRED										
062	DUPE	BLANK							BLANK								
061	4600						ACTUAL MANHOURS & COST	K2							1	U	
062	DUPE	BLANK					(35)		(42)		(60)			(67)	BLANK		
		BLANK							BLANK								

REMARKS (Not for Key Punch): SEA related.