

UNCLASSIFIED

AD NUMBER

AD389981

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to DoD only;
Administrative/Operational Use; 30 NOV 1979.
Other requests shall be referred to Army
Assistant Chief of Staff for Force Development,
Washington, DC 20310. Document partially
illegible.

AUTHORITY

AGO D/A ltr 29 Apr 1980

THIS PAGE IS UNCLASSIFIED

UNCLASSIFIED

AD NUMBER

AD389981

CLASSIFICATION CHANGES

TO: UNCLASSIFIED

FROM: CONFIDENTIAL

LIMITATION CHANGES

TO:
Distribution authorized to DoD only;
Administrative/Operational Use; 30 NOV 1979.
Other requests shall be referred to Army
Assistant Chief of Staff for Force Development,
Washington, DC 20310. Document partially
illegible.

FROM:
DTIC Classified Users Only. Controlling DoD
Organization: Army Assistant Chief of Staff for
Force Development, Washington, DC 20310. 11 Aug
1967. Document partially illegible.

AUTHORITY

31 Aug 1979, DoDD 5200.10 gp-4; 31 Aug 1979,
DoDI 5230.24

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

SECURITY

MARKING

The classified or limited status of this report applies to each page, unless otherwise marked.

Separate page printouts MUST be marked accordingly.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

**Best
Available
Copy**

CONFIDENTIAL

**DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310**



18 BACSFOR

19

AGAM-P (M) (7 Nov 67) FOR OT-RD-670626 20 November 1967

SUBJECT: Operational Report - Lessons Learned, Headquarters, 5th Battalion (AW)(SP),
2d Artillery, ~~Period Ending 31 Jul 67~~ *OP*

TO: SEE DISTRIBUTION

9 Operational rept. for ^{quarterly} period ending 31 Jul 67

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.
2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

DISTRIBUTION:

- Commanding Generals
 - US Continental Army Command
 - US Army Combat Developments Command
- Commandants
 - US Army Command and General Staff College
 - US Army War College
 - US Army Air Defense School
 - US Army Armor School
 - US Army Artillery and Missile School
 - US Army Aviation School
 - US Army Chemical School
 - US Army Engineer School
 - US Army Infantry School
 - US Army Intelligence School

REGRADED UNCLASSIFIED WHEN SEPARATED
FROM CLASSIFIED INCLOSURES

11 11 Aug 67

12 16p.

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U. S. C., Section 793 and 794. The transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

**D D C
RECEIVED
MAY 22 1968**

(Continued on page 2)

(003 650)

CONFIDENTIAL

...CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U. S. C., SECTION 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

670626

Incl 24

AD389981

FILE COPY

ef

CONFIDENTIAL

DISTRIBUTION (Cont'd)

US Army Medical Field Service School
US Army Military Police School
US Army Ordnance School
US Army Quartermaster School
US Army Security Agency School
US Army Signal School
US Army Special Warfare School
US Army Transportation School

Copies Furnished:

Office, Chief of Staff, US Army
Deputy Chiefs of Staff
Chief of Research and Development
Assistant Chiefs of Staff
Chief of Engineers
The Surgeon General
The Provost Marshal General
Research Analysis Corporation (Library)
Dr. Martin J. Bailey, OSD (SA)
National Aeronautics and Space Administration, Office of Defense Affairs
Joint Action Control Office
Documents Control Officer, Bell Aero Systems Co.
Director, Weapons System Evaluation Group
Commanding Generals
US Army Weapons Command
101st Airborne Division (-)
11th Infantry Brigade (Sep)
Commanding Officers
5th Battalion, 46th Infantry
5th Battalion, 12th Infantry
6th Battalion, 31st Infantry
31st Engineer Battalion (Cbt)
5th Battalion, 42d Artillery (155mm-T)
5th Battalion (AW)(SP) 2d Artillery

ADDRESS FOR		
CFSTI	WHITE SECTION	<input type="checkbox"/>
DDC	DIFF SECTION	<input checked="" type="checkbox"/>
UNANNOUNCED		<input type="checkbox"/>
JUSTIFICATION		
.....		
.....		
Y		
DISTRIBUTION/AVAILABILITY CODES		
DIST.	AVAIL.	and/or SPECIAL
9		

CONFIDENTIAL

CONFIDENTIAL

DEPARTMENT OF THE ARMY
HEADQUARTERS, 5TH BATTALION (AW) (SP) 2D ARTILLERY
APO San Francisco 96266

11 August 1967

SUBJECT: Operational Report For Quarterly Period
Ending 31 July 1967 (RCS-CSFCR-65) (U)

THRU: Commanding General
II Field Force Vietnam Artillery
APO US Forces 96266

Commanding General
II Field Force Vietnam
APO US Forces 96266

Commanding General
United States Army Vietnam
ATTN: AVC-DH
APO US Forces 96307

Commander In Chief
United States Army Pacific
ATTN: GPOP-MH
APO US Forces 96558

TC: Assistant Chief of Staff for Force Development
Department of the Army
Washington D.C. 20310

(C) Operational Report - Lessons Learned for Quarter Ending 31 July 1967
is submitted in compliance with USARV Regulation 870-2.

Section I: Significant Organization Activities

a. General: During the reporting period the battalion remained assigned to U.S. Army Vietnam, attached to II Field Force Vietnam, with operational command exercised by II Field Force Vietnam Artillery. Battery A remained under the operational control of the 1st Infantry Division. Battery B remained under the operational control of the 25th Infantry Division Artillery. Battery C remained under the operational control of the 9th Infantry Division Artillery. Battery D was withdrawn from operational control of 25th Infantry Division Artillery and became the GS Battery for II Field Force Vietnam Artillery. Battery D (MG) 71st Artillery was deployed as follows: 1st section attached to Battery D and employed at Fire Support/Patrol Bas. at Soui Da, 5th section went under operational control of 54th Artillery Group and employed at Fire Support/

Group 4

Downgraded at 3 year intervals
Declassified after 12 years

FOR OT RD FILE
670626

CONFIDENTIAL

**SUBJECT: Operational Report for Quarterly Period Ending
31 July 1967, (RCS-CSFOR-65) (U)**

11 August 1967

4/

Patrol Base which was opened at Ham Tan on 10 July 1967, 4th section and half of the 2d section remained at Quan Loi under operational control of Task Force Dixie, 3d section remained attached to Battery C, and 6th section and half of the 2d section remained attached to Battery B. Battery I (SLT) 29th Artillery was deployed as follows: 1st Platoon remained under operational control of 1st Infantry Division Artillery, 3rd Platoon remained attached to Battery B, and 2d Platoon was withdrawn from 9th Infantry Division Artillery and became the GS Platoon for II Field Force Vietnam Artillery. The 2d Platoon is employed as follows: 4 searchlights each at Fire Support/Patrol Bases at Soui Da and Ben Luc, 2 searchlights at Fire Support/Patrol Base at Ham Tan and 2 searchlights at the battalion base camp (YT127114). During the reporting period 4 M42s from Battery D went under operational control of 54th Artillery Group and were employed at Fire Support/Patrol Base which was opened at Ben Luc on 3 July 1967. During the reporting period elements of the battalion supported the following operations: Banking Sands, Kole Kole, Lamson 67, Paddington, Akron, Task Force Dixie, Manhattan, Diamond Head, Kawala, Akuma, Makalapa, Shelton, Red Ball I and II, Blue Shield II, Billings, Dallas, Junction City II, Interprise, and Coronado I.

b. Administrative/Personnel:

(1) Strength:

5th Battalion (AW)(SP) 2d Artillery is organized under TO&E 44-85F. Battery D (MG) 71st Artillery is organized under TO&E 44-58F. Battery I, (SLT) 29th Artillery is organized under TO&E 6-558E, with authorized and assigned strength as of 31 July 1967 as follows:

	<u>AUTHORIZED</u>			<u>ASSIGNED</u>		
	<u>OFF</u>	<u>WO</u>	<u>EM</u>	<u>OFF</u>	<u>WO</u>	<u>EM</u>
5th Bn (AW)(SP) 2d Arty	37	3	658	39	3	750
Btry D (MG) 71st Arty	2	0	112	2	0	140
Btry I (SLT) 29th Arty	7	0	144	4	0	142

(2) Gains and Losses

	<u>GAINS</u>			<u>LOSSES</u>		
	<u>OFF</u>	<u>WO</u>	<u>EM</u>	<u>OFF</u>	<u>WO</u>	<u>EM</u>
5th Bn (AW)(SP) 2d Arty	8	0	50	5	0	18
Btry D (MG) 71st Arty	1	0	6	0	0	5
Btry I, (SLT) 29th Arty	4	0	3	7	0	6

Group 4
Downloaded at 3 year intervals
Declassified after 12 years

CONFIDENTIAL

SUBJECT: Operational Report for Quarterly Period Ending
31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

(3) Casualties during the period include

<u>TYPE</u>	<u>NUMBER</u>
Killed in action	2
Died of battle wounds	0
Wounded in action	25
Missing in action	0
Non-battle deaths	1

(4) Personnel Management

No significant occurrences during the reporting period.

(5) Rest and Recuperation Program

(a) The following out-of-country R&R trips were taken by members of this organization:

<u>LOCATION</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>
Hawaii	13	14	11
Hong Kong	10	11	13
Manila	4	3	4
Tokyo	13	12	16
Bangkok	13	12	16
Singapore	3	0	6
Taipei	12	12	21
Penang	3	3	5
Kuala-Lumpur	3	3	4

(b) The following in-country R&R trips were taken by members of this organization:

<u>LOCATION</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>
Vung Tau	15	15	25

(c) This headquarters R&R program operates within the allocations given to II Field Force Vietnam.

(6) Morale

The morale of this organization is high.

(7) Awards and Decorations

The following awards and decorations were presented during the reporting period.

<u>AWARD</u>	<u>NUMBER</u>
Silver Star	1

Group 4
Downgraded at 3 year intervals
Declassified after 12 years

CONFIDENTIAL 3

SUBJECT: Operational Report for Quarterly Period Ending 11 August 1967
31 July 1967 (RCS-CSTOR-65) (U)

CONFIDENTIAL

<u>AWARD</u>	<u>NUMBER</u>
Bronze Star Medal	6 w/V device, 13 for service or achievement
Soldier's Medal	1
Air Medal	0
Army Commendation Medal	6 w/V Device, 10 for service or achievement
Purple Heart	50
Good Conduct Medal	4

(8) Discipline, Law and Order

The following judicial and non-judicial actions were conducted during the reporting period:

Article 15	22
Summary Court Martial	1
Special Court Martial	0
General Court Martial	0

(9) Safety

(a) During the reporting period there were two artillery incidents caused by ricocheting rounds.

1 The first incident occurred during a normal H & I mission being conducted by a M55 "Quad 50". One 50 Cal round entered a native hut from a direction which indicated that it was a ricochet and wounded two Vietnamese civilians. The angle at which the round entered the building precludes that the weapon was fired directly in the village as there was ten or more closely grouped houses located between the weapon and the house that was hit. No evidence was found of additional rounds in the area. It was the conclusion of the investigating officer that the incident was caused by a single round that ricocheted off trees located outside the village and in line with the direction of fire of the weapon. Further investigation indicated that the fire was conducted within the safety limits, however to insure a further margin of safety, the fire limits were moved an additional 800 mils away from the village for a total safety limit of 1200 mils.

2 The second incident occurred during a normal H&I mission being conducted by a M42 "Duster". 40MM rounds from the "Duster" landed 61 mils left and at a 500 meter greater range than actually fired, killing two Vietnamese and wounding two. Investigation indicated that a number of rounds were fired that did not have a tracer element. Firing was stopped, ammo lots were changed and tracers were observed from all rounds in the second lot. The point of impact was over 4,000 meters from the firing position. Therefore, the probable cause of the incident was a combination of a nonfunctioning tracer element in the projectile and a ricochet. If functioning properly, self destruction of the round would occur at tracer burnout, which is 3500 meters.

(b) This Battalion has experienced many cases of ricocheting rounds during the reporting period. There is no solution to the problem

Group

Downgraded at 3 year intervals
Declassified after 12 years

CONFIDENTIAL 4

CONFIDENTIAL

SUBJECT: Operational Report - For Quarterly Period
Ending 31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

but caution should be exercised when firing over water, in areas where there are large ant hills and in dense jungle. Extreme caution is needed when firing into an area where helicopters are operating as many rounds ricochet up causing flak at various altitudes.

(c) The Battalion had one death caused by the accidental discharge of an M-16. An individual pulled the slide of his weapon back to check for the presence of a round in the chamber, when he let the slide of the weapon go forward a round discharged and struck his friend in the chest, killing him almost instantly. Safety orientations are continually held for all personnel to prevent complacency and remind personnel of the hazards associated with small arms.

(d) One man sustained burns and there was some property damaged when gasoline ignited from being spilled on a hot exhaust pipe of an M-42. The man was pouring gas from a 5 gal can w/spout into the fuel tank of an M42 when a small amount of gas spilled on the hot exhaust pipe igniting the gas can. All members of the unit were informed again of the safety requirements for refueling vehicles. In this case, unsafe personnel factors were involved in that the gasoline was poured into the fuel tank too fast causing the fuel inlet to overflow onto the hot exhaust pipe.

c. Operations and Intelligence

(1) Missions: During the reporting period elements of the battalion were used in the following missions or roles:

- (a) Perimeter Security
- (b) Convoy escort
- (c) Security of road clearing parties
- (d) Road outposting
- (e) Blocking force or flank security
- (f) Direct fire support of maneuver elements to include:

- 1 Reconnaissance by fire
- 2 Preparatory fires
- 3 Covering fires
- 4 On call, will adjust, direct fires.

- (g) H&I fires for basecamp perimeter
- (h) Search and destroy
- (i) Village seal
- (j) Mobile reserve or ready reactionary force
- (k) Riverine fire base or patrol
- (l) Helilift operations
- (m) Security of Rome Flow operations
- (n) Amphibious Beach Landings in conjunction with opening

new Fire Support/Patrol Bases.

Group 4

Downgraded at 3 year intervals
Declassified after 3 years

CONFIDENTIAL

CONFIDENTIAL

SUBJECT: Operational Report for Quarterly period Ending 11 August 1967
31 July 1967 (RCS-CSFOR-65) (U)

(2) Operations and Intelligence Function

The battalion operations and intelligence section continued to function as a point of coordination between major supported commands, as an AW advisor for major supported commands, and keeping the commander informed of the current tactical situation as it pertains to elements of the battalion and of any problems that exist that would affect the battalion capability to satisfactorily perform their mission.

(3) During the reporting period, the Battalion sustained one combat loss on a M55. No M-42s were lost. Replacement of the M55 took 37 days.

(4) During the reporting period a critical shortage of searchlight repair parts existed which resulted in 12 searchlights being deadlined at one time. However, at the present time, an adequate amount of repair parts are available. One item that greatly reduced the number of deadlined searchlights is a conversion kit which will change a 100 amp alternator to the 180 amp alternator required for searchlight use.

(5) The chart below shows a comparative summary of mining incidents and major parts usage since deployment to Vietnam.

	<u>MINES</u>	<u>ENGINES</u>	<u>TRANS</u>	<u>FINAL DRIVE</u>	<u>RD WHEELS</u>
Battery A:	11	25	11	4	74
Battery B:	2	9	4	2	10
Battery C:	3	24	8	4	50
Battery D:	3	3	3	1	16

SECTION II, Part I - Observation/Lessons Learned (U)

M-55 Helilift Techniques

Item - (U) No formal M-55 helilift techniques exist in current Department of the Army applicatory training literature or manuals. The techniques listed below were developed by Battery D (MC) 71st Artillery, attached to 5th Battalion (AW)(SP) 2d Artillery, and have been used in over 50 combat helilift operations in Vietnam.

Discussion - (U) In preparation for helilift operations the M-55 mount is first removed from the 2 $\frac{1}{2}$ ton truck in the vicinity of the pick up point. Necessary slings and cargo bags are issued prior to the arrival of the CH-47 helicopters. In some cases, where this sort of operation is frequent, the slings and cargo bags are part of the organic squad equipment. The cargo bag (A-22 Kit) is then loaded using the following checklist:

Combat Checklist for Helilift

a. Ammunition:

10,000 rds .50 cal.

5

Group 4

Downgraded at 3 year intervals

Declassified after 12 years

CONFIDENTIAL

9
SUBJECT: Operational Reg
Ending 31 July 1967 (RCS-CSFOR-65) (U)

CONFIDENTIAL

11 August 1967

1,000 rds 7.62mm
860 rds 5.56mm
One box ea trip flares, claymore mines, and hand grenades.

b. Rations and other gear:

2 ea 5 gal cans of water
1 ea case of "C" rations
1 ea 5 gal can of gas
1 ea 5 gal can 30 wt oil
4 can PL special oil
BILI for M-55 (May include machine gun barrels and spare barrels)
Pioneer tools
500 sandbags
Personal gear of crew

After the A-22 bag is loaded and secured, the A-22 bag is brought together with the M-55 mount. The mount should have the jack mounting brackets facing the A-22 bag.

Wooden dunnage between the two will prevent damage. The guns are left on the mount and covered with canvas or any available material so as to minimize the effect of the dirt and debris caused by the severe prop wash of the CH-47. The barrels are removed from the guns and along with the spare barrels, placed in the gunners seat or packed in the A-22 bag. The M-18 reflex sight is also removed and placed in its carrying case. The guns are then elevated to 45 degrees so the sight bar and the trunion lube points are even. The mount itself is not covered due to the lack of a quick disconnect capability. If at some future date, a quick disconnect canvas is developed, it also would be used to minimize the effect of dirt and debris.

Eight two foot sling legs or straps are used. They are fastened to clevises which in turn are fastened to the four lifting eyes at the top of the mount and the four corners of the A-22 bag. One two loop sixteen foot suspension sling is then used to join the straps together. A donut; a continuous nylon loop strap, shaped like a donut; is also attached to the suspension sling and is placed into the suspension hook of the CH-47 while it hovers over the load. The sixteen foot suspension sling must be adjusted so that the load is balanced. Normally the length to the A-22 bag is half the length to the mount.

Prior to hooking to the load, the CH-47 lands and the crew boards the aircraft. The AN/PRC-25 radio is carried by the left cannoner. The M-60 machine gun is carried by the driver along with 200 rounds of ammunition. The M-18 reflex sight is carried by the Squad Leader or the gunner if the Squad Leader had gone forward with a reconnaissance party.

The CH-47 will then hover over the M-55 and A-22 bag while the donut is placed in the suspension hook by someone not going forward. Caution must be exercised on several accounts during this portion of the procedure. The person making the connection must stand on the top of the load in order to make the hook. He must have a firm well balanced footing or he will be blown off by

Group 4

Downgraded at 3 year intervals

Declassified after 12 years

7
CONFIDENTIAL

CONFIDENTIAL

SUBJECT: Operational report for CH-47 crew, F-105
Ending 31 July 1967 (RCS-CSEFOR-65) (U)

11 August 1967

10

the 100 MPH winds of the hovering CH-47. He must watch that the CH-47 does not settle to low and cause possible damage to the load or injury to himself. He must be careful when placing the donut into the suspension hook so as not to touch the metal portion of the hook. Doing so will result in a shock from static electricity of sufficient magnitude to knock him off the load regardless of his footing. Once hooked up the CH-47 makes its lift and the M-55 and crew is moved to their destination. The entire load, internal and external combined, weight in the vicinity of 8,000 pounds and can be lifted in one CH-47 sortie.

Where possible, the squad leader should precede his mount into position and select his firing site. This, of course, is coordinated with the commander of the supported unit. When his M-55 arrives, smoke is placed on the site and the CH-47 will lower the mount at the proper location, thereby minimizing subsequent moves. Moves are difficult due to the small wheels on the M-55 and the rough terrain in most areas in Vietnam.

Observation (U) The helilift capability of the M-55 provides a flexible and highly mobile automatic weapons capability available for perimeter security during that type of operation.

FIELDS OF FIRE FOR AUTOMATIC WEAPONS (U)

Item - (U) In order to achieve minimum response time when firing suppressive counter mortar fire from night defensive positions, it is necessary that permissive fields of fire be defined for all automatic weapons employed on the perimeter.

Discussion - (U) There have been several recent incidents where night defensive positions on Fire Support/Patrol Bases which have had automatic weapons employed on their perimeter have received enemy mortar rounds. In several cases the automatic weapons crew observed the flashes from the mortar positions but were either delayed or prohibited from returning suppressive fire by having to call the command post and request permission to fire. Several other positions had permissive fields of fire and were able to bring fire on the enemy position immediately. A permissive field of fire is defined as a field of fire for a given period in which permission to fire is automatically granted in the event of attack. Permissive fields of fire would change as the positions of ambush patrols, CPs, LPs, etc, changed. They are plotted on a range card for instant use in the event of attack. If, in the example above, mortar flashes are observed by an automatic weapons crew, the squad leader checks his range card to see if the flashes are in a permissive field of fire and, if so, brings immediate suppressive fire onto the area. He would also report the position of the flashes to the TOC or FDC as appropriate.

Group 4
Downgraded at 3 year
intervals.
Declassified after 12 years

CONFIDENTIAL

CONFIDENTIAL

USJ CT: Operational Report - for Quarterly Period
Ending 31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

11
Observation - (U) An enemy mortar attack or penetration attempt can more rapidly be countered through the use of permissive fields of fire. Personnel in charge of automatic weapons elements should coordinate closely with the supported unit in order to have timely and accurate permissive fields of fire defined for all fire positions.

Test Firing of Automatic Weapons (U)

Item - (U) To insure maximum operational readiness and crew proficiency, it is necessary to test fire at least weekly.

Discussion - (U) Weapons must be test fired at least weekly in order to insure that they will function correctly during an engagement. All weapons are disassembled, cleaned, reassembled, and adjusted daily. Each day there is a possibility for error in assembly or adjustment. Certain components of the automatic weapons required periodic exercise, such as the recoil cylinders and recuperator spring. Crew proficiency and confidence will also deteriorate unless the weapons are test fired periodically or fired in combat. Many places where automatic weapons are employed have been spared enemy attack for long periods at a time and as a result weapons have not been fired in anger or exercised for these periods. In order to insure that the weapons function properly test firing must be programmed. Test firing may be accomplished from the location where employed after effecting necessary fire coordination or from a field location in the vicinity. If neither of the two methods are feasible then crews should be rotated with their equipment between areas of active firing and areas of lesser activity.

Observation - (U) Test firing of automatic weapons is essential at least once a week and can be accomplished thru effective scheduling and coordination.

Arrangement of Firing Site, Bunker and Quarters Area (U)

Item - (U) The living area of the weapons crews must be as close to the firing position as possible.

Discussion - (U) Readiness to deliver rapid on call automatic weapons fire is the prerequisite for 40mm and cal .50 multiple weapons when deployed as perimeter security or ready reaction force (RRF) systems. Similarly, crew protection during ground or mortar attack comes second only to selection and emplacement of the weapon. Lessons learned during field operations by units of this command have established that rapid transition from living quarters to overhead cover to manning the guns is best achieved when the following is true.

- a. Location of overhead bunker as part of weapon bulwark.
- b. Living quarters are collocated as part of overhead bunker and as near the weapon as possible.

Group 4
Downgraded at 5 year
intervals
Declassified after 12 years

CONFIDENTIAL

11-9

CONFIDENTIAL

SUBJECT: Operational Report - for Quarterly Period
Ending 31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

12

Observation - (U) This type of construction scheme enhances crew protection as well as weapon system employment. During mortar attacks, crews may obtain protection without prolonged exposure to fire due to excessive distance to cover from either the weapon or living quarters. During an active defense or when called as reaction force, the minimum reaction time is achieved and maximum control is maintained.

Combat Area Common Hazards - (U)

Item - (U) Convoy hazards are greatly increased in the combat zone.

Discussion - (U) In CONUS, routine convoys were often marred by accidents. These accidents were usually due to either equipment failure or poor driver judgement. The same type of road problems are found in Vietnam only in greater quantities and usually under worse weather conditions. Drivers have, for the most part, overcome the speed problem, and equipment failure is negligible. The new and more serious danger of mines is introduced in the combat area that drivers can avoid if the following causes are recognized and preventive action taken.

a. On poor roads or under poor weather conditions in convoys consisting of a mixture of heavy haulers and wheeled vehicles; track vehicles have a tendency to close up faster and pull away easier.

b. In closing up the danger of an accident is compounded if the front vehicle hits a mine.

c. The effects of the blast are then shared by two vehicles instead of one and additional damage and often injuries are experienced because a driver followed too close.

d. This danger is multiplied, in effect, when one of the vehicles is hauling POL or ammunition.

e. Recent injury to a member of this unit lends credence to this danger as the driver let his track get too close to a vehicle that subsequently hit a mine.

Observation - (U) A positive approach when discussing accidents due to "tailgating" would be to also emphasize the danger associated with hostile mine action. When we reduce accidents we reduce injury and equipment down time.

Combined Xenon Searchlight, M-42 and M-55 Operations - (U)

Item - A need exists for the development of a gun sight that takes advantage of the infra-red searchlight.

Discussion: A field-expedient infra-red sight has been devised through the use of the reflex sights organic to the M-42 and M-55 and the infra-red mesascope organic to each infra-red searchlight. The basic principle is simple; the M-24 reflex sight on the M-42 and the M-16 reflex sight on the

CONFIDENTIAL 10

Group 4
Downgraded at 3 years intervals
Declassified after 12 years

CONFIDENTIAL

SUBJECT: Operational Report - for Quarterly Period
Ending 31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

13
M-55 can be artificially illuminated at night. The infra-red metascope has no magnification hence no adjustment of focus is necessary to clearly distinguish between near or far objects. When the searchlight illuminates an enemy target, the gunner will sight through the metascope to see the lighted reticle pattern of the reflex sight and he will position the guns so that the reticle pattern is centered on the target illuminated by infra-red light.

A step-by-step procedure is outlined below as a guideline for use of this method.

1. Preparations:

- a. Whenever possible, collocate M-42's and M-55's with Xenon searchlights.
- b. Boresight the reflex sight on the M-42/M-55 for 500 meters.
- c. Place M-42's in manual operations.
- d. Establish some means of communications between the M-42/M-55 and the searchlight.
- e. Lay the M-42 and the searchlight on a grid azimuth.
- f. The M-42/M-55 will keep the infra-red metascope for sighting and the searchlight will use the infra-red binoculars for searching.
- g. Mount the metascope in conjunction with the M-42/M-55 reflex sight, insure that the optical center of the metascope is generally aligned with the reticle pattern of the reflex sight in order to afford maximum peripheral vision to both sides of the cross hairs. A mount specifically designed for this purpose is presently being fabricated by the 725th maintenance Bn, 25th Infantry Division. Until such time as a mount is available the metascope can be hand held. This, however will allow the gunner the use of only one hand to adjust the elevation of the guns.
- h. Ensure that the speed of the computing sight is set to zero before operation of the reflex sight.

2. Normal Operation:

- a. The searchlight will scan the desired area and the searchlight crew will observe with the infra-red binoculars. The M-42/M-55 crew can scan with the metascope detached from the mount.
- b. When a target is visually located, the searchlight crew will focus infra-red light on the target.
- c. The gunner of the M-42/M-55 will illuminate the reflex sight with the organic night-lighting device and will adjust the intensity of the artificial light to such a point that the reticle pattern of the sight is visible and at a comfortable distance from the reflex lens.
- d. In manual operation, it will be necessary for the gunner to direct the azimuth tracker onto the target. However, if the gunner is proficient in power operation and if a mount is available to hold the metascope, it is conceivable that power operation would be more desirable.
- e. When the target is centered in the reticle pattern on the reflex sight, the gunner can fire and expect first round accuracy.
- f. If the target should move, the searchlight crew can keep the light on the target by viewing through the binoculars and the M-42/M-55 can track the target through the metascope and reflex sight.

Group 4

11.

Downgraded at 3 year intervals
Declassified after 12 years

CONFIDENTIAL

CONFIDENTIAL

SUBJECT: Operational Report - ICR Quarterly Period
Ending 31 July 1967 (RCS-CSFOR-65) (U)

11 August 1967

14

Observation: (U) Experimentation has demonstrated that the capabilities of the searchlight can be coupled with the M-42 and M-55 and completely deny unobserved enemy penetration of our perimeter of defense.

SECTION II, PART II RECOMMENDATIONS: (U)

A Limited Night Target Acquisition Capability (U)

Elements of this battalion are habitually given extensive night perimeter security missions. Currently elements of this battalion are actively providing security for:

- a. 14 fire support/patrol bases
- b. 10 base camps
- c. 1 rock quarry
- d. An airfield/re-supply area
- e. 5 night defense positions

At present the night target acquisition capability does not parallel the range capability of either the M-42 or the M-55. Occasionally a Xenon searchlight is available for use in conjunction with a M-42. The great majority of the time however, the only target acquisition means available is a pair of binoculars, which are highly dependent upon the amount of moonlight available. Even under the best conditions at night, the binoculars are barely adequate for target acquisition. There are two recent examples in which casualties and equipment damage could possibly have been averted if night detection devices had been available:

a. Two M-55's were providing perimeter security for a Fire Support/Patrol Base near Trung Lap. Under the cover of darkness, an unknown number of Viet Cong were able to get close enough to fire an RPG-2 at the M-55. The M-55 was destroyed and there was one man killed and one man wounded.

b. Six M-55's were providing perimeter security for a large complex at Quan Loi. Under the cover of darkness, an estimated company of Viet Cong were able to surreptitiously breach the perimeter fence and conduct a coordinated mortar and ground attack. The results were considerable US casualties and significant equipment damage.

The addition of a starlight scope, line item U 29238 1, for each M-42 and M-55 would make them a much more formidable night perimeter security weapon by denying to a greater degree the cover of darkness to the Viet Cong. This headquarters submitted an MIOE on 25 May 1967 which will add the starlight scopes. Also, on 27 July 1967, a request for emergency issue of the starlight scopes was submitted.

RECOMMENDATION: Early approval of the request for emergency issue and that a starlight scope, line item U 29238 1, be included in future TOE for each M-42 and M-55.

DISTRIBUTION:
Special

JOHN D. LEWIS
LTC, Artillery
Commanding

12
CONFIDENTIAL

15
CONFIDENTIAL



AVFB-FAC (11 Aug 67) 1st Ind
SUBJECT: Operational Reports - Lessons Learned (U)

DA, HQ, II FFORCEV Arty, APO 96266

THRU: Commanding General, II Field Force Vietnam, APO 96266

Commanding General, United States Army Vietnam, ATTN:
AVHGC-DE, APO 96375

Commander in Chief, United States Army Pacific, ATTN:
GPOF-OT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department
of the Army, Washington D. C. 20310

1. (U) The quarterly report of the 5th Battalion (AW) (SP),
2d Artillery (VIC W-FQJ-AA) adequately reflects the operations and
lessons learned during the reporting period.

2. (C) The following comments pertain to the attached Opera-
tional Report - Lessons Learned:

a. Section I, paragraph b, (9)(a)1&2. The automatic wea-
pons HAI program is continually monitored to provide increased margins
of safety. On occasion, this headquarters has suspended automatic wea-
pons HAI fires at selected firing positions, due to the density and
closeness of the civilian populace.

b. Section I, paragraph c, (4). There is a definite require-
ment for an in-country repair facility for the 23 inch Xenon Searchlight.
The turn-around times involved with transferring defective sub-assemblies
to Granite City Arsenal in CONUS are unacceptable. Additionally, ade-
quate stockages of in-country repair parts should be provided. This was
recommended in this headquarters' Operational Report - Lessons Learned
for this period.

c. Section II, Part II, Concur. There is a definite re-
quirement for increased night target acquisition capabilities commensurate
with the range capabilities of the automatic weapons. The request for
emergency issue of the starlight scopes, mentioned in Section II, Part
II, was approved by II FFORCEV and forwarded to USARV on 13 August 1967.
The II FFORCEV indorsement further stated that these required starlight
scopes are not available for redistribution from present II FFORCEV assets.

13
Raymond P. Murphy
RAYMOND P. MURPHY
Brigadier General, USA
Commanding

Downgraded at 3 year intervals
Declassified after 12 years
DOD DIR 5200.10

CONFIDENTIAL

24 AUG 1967

AVFBC-H (11 Aug 67) 2d Ind
SUBJECT: Operational Report-Lessons Learned, HQ 5th Battalion (AW) (SP)
2d Artillery, 31 July 1967 (RCS CSFOR-65)

DA, HQ II FFORCEV, APO San Francisco 96266 24 AUG 1967

THRU: Commanding General, USARV, ATTN: AVHGC-DH, APO 96375

Commander in Chief, US Army Pacific, ATTN: GPOP-MH, APO 96558

TO: Assistant Chief of Staff for Force Development, Dept of the Army,
Washington, D.C. 20310

1. (U) Subject report is forwarded.
2. (U) This headquarters concurs with the comments and recommendations in the basic report and the first indorsement.

FOR THE COMMANDER:



R. E. WAMSLER
CPT, AGC
Asst AG

1 Incl
nc

CONFIDENTIAL

17

AVHGC-DST (11 Aug 67) 3d Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 July 1967 (RCS CSFOR-65) (U)


HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375 : 7 SEP 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT,
APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 July 1967 from Headquarters, 5th Battalion (AW) (SP), 2d Artillery, WFQJAA as indorsed.

2. (C) Pertinent comment follows: Reference item concerning a limited night target acquisition capability, section II, part II, page 12: Concur. Comments and recommendation are appropriate.

FOR THE COMMANDER:


EDY
Asst AG

*Downgraded at 3 year Intervals
Declassified after 12 years
DOD DIR 5200.10*

CONFIDENTIAL

18

GPOP-DT(11 Aug 67)

4th Ind (U)

SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967
from HQ, 5th Bn AW (SP) 2d Arty (UIC: WFQJAA)(RCS CSFOR-65)(U)

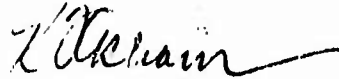
HQ, US ARMY, PACIFIC, APO San Francisco 96558 30 OCT 1967

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

1. This headquarters has evaluated subject report and forwarding
indorsements and concurs in the report as indorsed.

2. This headquarters has not received the MTOE reportedly
submitted per paragraph b, Section II, Part II, page 12 of basic report.

FOR THE COMMANDER IN CHIEF:



K. F. OSBOURN
MAJ, AGC
Asst AG