

UNCLASSIFIED

AD NUMBER

AD509876

CLASSIFICATION CHANGES

TO: unclassified

FROM: confidential

LIMITATION CHANGES

TO:

Approved for public release, distribution unlimited

FROM:

Controlling DoD Organization: Assistant Chief of Staff for Force Development, [Army], Washington, DC 20310.

AUTHORITY

AGO D/A ltr, 29 Apr 1980; AGO D/A ltr, 29 Apr 1980

THIS PAGE IS UNCLASSIFIED

Best Available Copy



~~CONFIDENTIAL~~ UNCLASSIFIED  
DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (22 Jun 70) FOR OT UT 701103 29 June 1970

SUBJECT: Operational Report - Lessons Learned, Headquarters, 145th  
Aviation Battalion, Period Ending 31 January 1970 (U)

Reference is made to the report of the National  
Defense Research and Development Agency of the  
Department of Defense.

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Information of actions initiated as a result of subject report should be forwarded to ACSFOR OT UT 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
  - US Army Materiel Command
- Commandants
  - US Army War College
  - US Army Command and General Staff College
  - US Army Air Defense School
  - US Army Armor School
  - US Army Aviation School
  - US Army Combat Surveillance School
  - US Army Electronic Warfare School
  - US Army Engineer School
  - US Army Field Artillery School
  - US Army Infantry School
  - US Army Missile and Munitions School
  - US Army Ordnance School

JUL 10 1970

Regraded unclassified when separated  
from classified inclosure.

~~CONFIDENTIAL~~

UNCLASSIFIED

AD 509876  
AD 509876

20050315087

~~CONFIDENTIAL~~

UNCLASSIFIED

DISTRIBUTION (Cont'd)  
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  
OSD(SA) Assistant for Southeast Asia Forces  
Director, Defense Research & Engineering  
Office, Joint Chiefs of Staff  
Commanding Generals  
    US Army Weapons Command  
    US Army Flight Training Center  
Deputy Chief of Staff, Air Force, Plans & Operations  
Commandant of the Marine Corps  
USAF Air Ground Operations School  
The Air University Library  
Director, Weapons Systems Evaluation Group  
Defense Documentation Center  
USAF Project RAND  
Documents Control Officer, Bell Aero Systems Co  
Gyrodyne Co of America Inc  
Commanding Officers  
    US Army Limited War Laboratory  
    US Army Logistics, Doctrine Systems & Readiness Agency  
    US Army Aviation Test Activity  
    US Army Mobility Equipment Research & Development Center  
    145th Aviation Battalion

~~CONFIDENTIAL~~

UNCLASSIFIED

UNCLASSIFIED

~~CONFIDENTIAL~~

DEPARTMENT OF THE ARMY  
HEADQUARTERS, 145TH AVIATION BATTALION (COMBAT)  
APO San Francisco 96227

"FIRST IN VIETNAM"

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES SCFOR-65 (R2)

SEE DISTRIBUTION

1. Operations: Significant Activities:

a. Mission: The overall mission of this Battalion did not change during the reporting period. This mission is to augment the capabilities of II Field Forces Vietnam and the Republic of Vietnam forces which operate in the III Corps Tactical Zone.

b. Organization:

(1) The following organizational changes took place during this reporting period: 4 Dec 69 the 391st CI Det was assigned to HHC, 145th Avn Bn (Cbt). It was further attached to the 323rd Airfield Service Detachment for rations, quarters, administration, and jurisdiction under the Uniform Code of Military Justice.

(2) As of 31 January 1970, the Battalion was organized as shown by Inclosure 1.

c. Personnel:

(1) Command and staff changes and present status:

(a) Commanding Officer, 145th Aviation Battalion (Combat) (22 Nov 69)

Outgoing: LTC John J Top [redacted] FA  
Incoming: LTC Jack Seliskar [redacted] IN

(b) Battalion Executive Officer (1 Jan 70)

Outgoing: MAJ Robert H Desjardins [redacted] IN  
Incoming: MAJ Thomas R Wolf [redacted] IN

(c) Battalion Adjutant (15 Jan 70)

Outgoing: CPT Loren T Saxton [redacted] IN  
Incoming: CPT Michael J Scanlon [redacted] AR

FOR OT UT  
701103  
Inclosure

~~CONFIDENTIAL~~

DOWNGRADED AT 3 YEAR INTERVALS;  
DECLASSIFIED AFTER 72 YEARS.  
DOD DIR 5200.10

UNCLASSIFIED

UNCLASSIFIED.

~~CONFIDENTIAL~~

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

(d) Battalion S-2 (25 Jan 70)

Outgoing: CPT Bryson D Brown [REDACTED] MI  
Incoming: CPT Thomas A Shtogron [REDACTED] AR

(e) Battalion S-3 (25 Jan 70)

Outgoing: MAJ Robert A Glosson [REDACTED] IN  
Incoming: MAJ Douglas R Terrell [REDACTED] AR

(f) Battalion S-4

CPT Roderick J Anderson [REDACTED] CM

(g) Commanding Officer, HHC, 145th Avn Bn (Cbt) (13 Jan 70)

Outgoing: CPT Olen L Earnest [REDACTED] IN  
Incoming: CPT Jerry D McGlothlin [REDACTED] IN

(h) Commanding Officer, 68th Avn Co (Aslt Hel) (23 Nov 69)

Outgoing: MAJ Thomas G Moody, Jr. [REDACTED] IN  
Incoming: MAJ Luther L French [REDACTED] IN

(i) Commanding Officer, 118th Avn Co (Aslt Hel) (31 Dec 69)

Outgoing: MAJ Parney F Hancock [REDACTED] IN  
Incoming: MAJ Michael P Hefferman [REDACTED] IN

(j) Commanding Officer, 190th Avn Co (Aslt Hel) (6 Jan 70)

Outgoing: MAJ Joe D Jobe [REDACTED] IN  
Incoming: MAJ Dale W Pierce [REDACTED] IN

(k) Commanding Officer, 334th Avn Co (Atk Hel) (26 Nov 69)

Outgoing: MAJ John H Oliver [REDACTED] IN  
Incoming: MAJ Charles F Densford, Jr. [REDACTED] IN

(l) Commanding Officer, 324th AD(D)

Outgoing: MAJ Raymond L Hardy [REDACTED] IN  
Incoming: MAJ James H Hogan [REDACTED] IN

(2) Unit Strength: On 31 January 1970, the Battalion was at 91% total authorized strength. Individual unit strengths are shown by Inclosure 2.

2

~~CONFIDENTIAL~~

UNCLASSIFIED.

## CONFIDENTIAL

AVEACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

d. Aircraft Status: At the end of this reporting period the Battalion had on hand 86% of the total aircraft authorized. Aircraft status as of 31 January 1970, classified by unit and type of aircraft, is shown by Inclosure 3.

e. Chronology of Significant Events:

(1) On 15 Dec 69 this battalion became involved in an evaluation of the capability and productivity of air assets at full TO&E. The 118th Aviation Company (Assault Helicopter) was selected and placed in direct support of 3rd Pde, 9th Inf Div for a 90 day period. The 118th began the evaluation period at full TO&E and can expect to receive only their normal share of replacements during the 90 day test period. There is no restriction on blade hours, station time, or assault package size. The intent of the evaluation is to use all available mission ready aircraft in direct support of the ground unit. The only exception are those aircraft necessary for internal support of the aviation unit; i.e., training and maintenance aircraft. Minimum mission ready aircraft was expected to be 75%.

During the initial 30 day period, the 118th provided aircraft for only the 3rd of the 9th. Following this initial period, the 118th has provided one additional aircraft daily to II FFV for a general support mission.

At the end of the 30 day period the 118th had flown a total of 3,538 hours, hauled 26,887 troops, and carried 43 tons of cargo. Results from contact with the enemy included 8 sampans and 55 structures damaged or destroyed, plus 44 VC/NVA killed by air (KBA). These figures compare very favorably with the monthly averages for last quarter for the 118th. Those averages were: 2755 hours flown; 17,301 troops hauled; 90 tons of cargo carried; 1 sampan and 3 structures damaged or destroyed; plus 4 VC/NVA KBA.

The 3rd of the 9th has a standing request for 11 slicks and 4 guns each day and 4 slicks and 2 guns each night. It rapidly became apparent that an aviation company could not provide the required aircraft or aviators to meet the commitment on a continual basis. During the initial 30 day period, the 118th flew an average of 16 aircraft (55% total strength) and 36 aviators (56% total strength) every 24 hour period. This constitutes a maximum commitment on a continual basis. Since no unusual or extraordinary circumstances occurred which would have affected aircraft or aviator availability, the percentages given above can be considered reliable for planning purposes. The figure given at the outset of the test for percent of aircraft expected to be mission ready on a continual basis, has proven to be an inaccurate estimate. The limiting factors were found to be both aircraft availability due to normal maintenance and aviator availability due to maximum permissible flight hours in a 30 day period.

**CONFIDENTIAL**

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

(2) During the period 26 Dec 69 to 1 Jan 70, this battalion participated in Operation Holly (Bob Hope Christmas Show) and Operation Whitehat (Vice President Agnew's Visit). From 2 to 7 general support aircraft were provided each day in support of these 2 operations. In addition, on 1 Jan 70 a full flight company plus additional gunships and 2 liaison officers were furnished for Operation Whitehat.

(3) Communications security has received a great deal of emphasis during this past reporting period. The use of secure radio was greatly increased throughout the battalion. All sensitive communications between the company operations and battalion operations are now passed via secure voice. Secure voice equipment is presently installed and operational in 86% of the UH-1 aircraft in the battalion. Secure voice is used for air to ground communication, when the ground unit has the capability.

In addition to the emphasis given the use of secure voice, the use of classified call signs and authorized encryption systems has been stressed with all battalion aviators.

(4) The following is a list of the awards submitted and received by individuals in this battalion.

SUBMITTED	AWARD	RECEIVED
8	Silver Star	0
0	Legion of Merit	1
24	Distinguished Flying Cross	18
3	Soldier's Medal	3
2	Bronze Star "V"	2
94	Bronze Star	62
65	Basic Air Medal	94
973	Air Medal Oak Leaf Clusters	750
22	Army Commendation "V"	25
540	Army Commendation Medal	135
8	Purple Heart	6
27	USARV Certificate of Achievement	27

Award recommendations for Army Commendations Medals and Bronze Star Medals have more than doubled this period as a result of the new Brigade policy concerning achievement awards. This new policy has also resulted in the companies paying more attention to their awards programs.

F. RESULTS OF OPERATIONS: During this past reporting period, this battalion increased its operation in every category reported except enemy KPA, which was down only 3%. A breakdown of operational statistics is shown as Inclosure 4.

## CONFIDENTIAL

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

### 2. Lessons Learned: Commander's Observations, Evaluations, and Recommendations:

- a. Personnel: None
- b. Intelligence: None
- c. Operations:

#### (1) Prevention of Weapon System Hard Point Cracking on UH-1B Gunships

(a) OBSERVATION: During the past several months since the introduction of UH-1B in lieu of UH-1C gunships, this unit has experienced numerous incidents of weapon system hard points cracking. This situation has been especially prevalent in those aircraft equipped with the XM-159 system, and is due primarily to high hour airframes (2000-3700 hours).

(b) EVALUATION: Reduction of rocket loads from 19 to 15 in each pod was recommended and tested by the unit maintenance officer in conjunction with members of the gun platoon. Although this solution reduced the fire power of this particular gunship configuration, it at the same time, increased the availability. In view of the increased availability, it is felt that the advantages resulting from the reduced rocket load far outweigh the disadvantage of reduced fire power.

(c) RECOMMENDATION: That units experiencing similar problems with UH-1B gunships evaluate this solution in regards to their particular availabilities and mission requirements.

(d) COMMAND ACTION: The 190th Aviation Company (Assault Helicopter) has adopted the policy of using 15 rockets, instead of 19, in each pod of the XM-159 system.

#### (2) Prevention of Accidental Helicopter Door Gun Firing

(a) OBSERVATION: Recent incidents involving accidental discharges of helicopter door-guns in secure areas have shown a need for further precautions in insuring that the weapon is clear and safe.

(b) EVALUATION: Certain situations, i.e., double-feeding, have resulted in a round being in the chamber of the M-60 after it has been cleared by opening/locking the bolt and visually inspecting the chamber. Obviously if the chamber was visually inspected there should not be a round present. However, due to positioning of the weapon, normal wind turbulence in the crewchief/gunner walls, and use of visors for eye protection it is possible to miss detecting the round. To avoid completely any accidental firing, the barrel of the weapon may be removed upon touch-down in a secure area.

CONFIDENTIAL



CONFIDENTIAL

WR101-86  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)  
11 FEBRUARY 1970  
FORM 104 1970

(c) RECOMMENDATION: That helicopter crews equipped with M-60's, either mounted or free guns, remove the barrels upon reaching a secure area. It is not recommended that removal be attempted in flight.

(d) COMMAND ACTION: The 190th Aviation Company (Assault Helicopter) has adopted the policy of removing barrels from door guns upon touchdown in secure areas.

(3) Personnel injured by main rotor head

(a) OBSERVATION: Recently several crewmembers suffered pinched or lacerated fingers while inspecting or repairing parts on the main rotor head of the UH-1.

(b) EVALUATION: Crewmembers were injured when the controls in the cockpit were moved or the main rotor blade was rotated without warning.

(c) RECOMMENDATION: All crewmembers should be required to warn others prior to moving controls or the main rotor blade.

(d) COMMAND ACTION: Crewmembers within this unit have been instructed to audibly call "CLEAR" prior to moving controls or the main rotor blades.

d. Organization: None

e. Training: None

f. Logistics: Lack of Target Marking Capability in 1968 Model AH-1G Aircraft.

(1) OBSERVATION: Models of the AH-1G prior to 1968 have a smoke dispenser system which gives those aircraft the capability of marking targets and landing zones. The 1968 model AH-1G was produced with a new model smoke dispenser system, for which the dispensers were not procured or placed on the aircraft as an operational system. This has severely limited the capability of the aircraft to mark targets and landing zones, which must now be done orally or with ordnance.

(2) EVALUATION: There is a definite need for target marking capability in the AH-1G. Present lack of such a system requires pilots to orally indicate targets, to mark them with ordnance, or to fly low to ensure that other aircraft can be shown the exact location. A smoke rocket (2.75 in. FFAR) with an HE warhead was produced which could provide this capability. However, present stocks in RVN are old and defective, so that no present capability exists. The smoke dispensers designed for the 1968 model AH-1G aircraft are being tested and are not expected to be available until late 1970.

**CONFIDENTIAL**

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

(3) RECOMMENDATION: Sufficient quantities of HE/Smoke rockets, 10 lb warheads, M-157 and M-158, should be made available to units in RVN. This will allow target marking for AH-1G aircraft with no smoke dispensers, or with inoperative dispensers.

(4) COMMAND ACTION: The 334th Aviation Company (Attack Helicopter) has sent a letter to 1st Aviation Brigade explaining the necessity of making HE/Smoke rockets available in RVN.

g. Communication: None

h. Material:

(1) Emergency Jettison of Canopy on the AH-1G.

(a) OBSERVATION: During the period 17 Dec thru 22 Dec 69, the 334th Aviation Company (Attack Helicopter) had two occasions during which emergency jettison of the canopy doors was necessary to allow the crew to escape. On both occasions the forward canopy doors would not jettison, and on one occasion the rear canopy door would not jettison.

(b) EVALUATION: The problem seems to be that the present jettison system provides for release of the canopy door by unlocking the lower latch, and then pulling the emergency release latch. Often, in a crash, the aircraft comes to rest on the left side preventing jettison, or jamming the door so that it cannot be opened. Or the person in the aircraft is physically injured and cannot unlock one or both of the latches.

(c) RECOMMENDATION: That the canopy jettison system be re-designed to allow jettison of canopy panels on both sides of the cockpit, front and rear, so that either the pilot or co-pilot can jettison canopy doors on either side of the cockpit with a minimum of physical exertion.

(d) COMMAND ACTION: The 334th Aviation Company (Attack Helicopter) is preparing an EIR, with recommendations for canopy jettison systems re-design, to eliminate this unfavorable situation.

(2) Survival Equipment in AH-1G Aircraft.

(a) OBSERVATION: Several different survival equipment carrier configurations have been used in the AH-1G, and due to the limited space in the pilots and gunners compartments, most of those tested were found to be unsatisfactory. The one which most nearly meets the demands of the confined cockpit is the Air Force SRV-21P Vest.

(b) EVALUATION: It was determined that the STV-21P Vest carries the necessary items for the expected duration of survival or escape and evasion situations experienced by AH-1G crews in combat. No other standard or makeshift survival package was found to be satisfactory.

**CONFIDENTIAL**

**CONFIDENTIAL**

NVBACA-BC 11 February 1970  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

(c) RECOMMENDATION: That when present procurement of the SRV-21P Vest is effected, first consideration be given to issue of these vests to all pilots of AH-1G aircraft, and that the TO&E of attack helicopter units be amended to reflect this vest as the TO&E authorized survival package.

(d) COMMAND ACTION: This unit is awaiting announcement of a Federal Stock Number for the vests to be procured by the Army, and will requisition the vests as soon as possible.

(3) Washing of Aircraft in US Army Aviation Units.

(a) OBSERVATION: The TO&E of Army Aviation Units in RVN does not allow for equipment with which to wash aircraft in order to reduce damage and wear caused by dust and dirt.

(b) EVALUATION: Most units recognize the need to reduce wear and damage to aircraft caused by the dusty and dirty environment in which they operate. However, as no equipment is provided for this in the TO&E, Aviation Units are required to use makeshift methods, such as "buckets of water", hand-held fire extinguishers, converted fire trucks, converted fuel pump systems, etc. These often prove only partially satisfactory, and divert supply items intended for other purposes.

(c) RECOMMENDATION: That TO&E's of aviation units of all types operating in RVN be changed to add equipment with which to wash aircraft. The most practical and least costly system would seem to be the issue of a pump and hoses to be used in conjunction with the standard issue water trailer (400 gallon M-149). Since the trailers are already standard in most units, it would require only the addition of pumps and hoses to give aviation units the needed capability to wash aircraft.

(d) COMMAND ACTION: The 334th Aviation Company (Attack Helicopter) is experimenting with methods of adapting the water trailer for use in washing aircraft. A report will be sent forward when the most satisfactory method is found.

(4) Ammunition for the XM-35 Armament System (20mm) on the AH-1G.

(a) OBSERVATION: The present 20mm linked ammunition issued for the XM-35 Armament System used on the AH-1G is severely limiting because it offers no versatility as to terrain and type targets engaged.

**CONFIDENTIAL**

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion (Combat), Period Ending 31 January 1970 RES CSFOR (R2)

(b) **EVALUATION:** The issue ammunition FSN 1305-143-7034 consists of four rounds of HE and one tracer. It has been found that the HE round is good against targets where instant detonation is desired, such as with troops in the open, sampans, etc. However, it is ineffective in trees, against bunkers, against covered positions, etc. The present situation in RVN does not allow for loading of the aircraft for particular missions, and, therefore an AH-1G must be capable of engaging targets of all types in all types of terrain, on very short notice. To meet the requirement of the varied terrain and targets encountered, HE, Armor Piercing, Incendiary, and tracer ammunition has been developed, however, the present linked configuration does not lend itself to effectiveness against varied targets.

(c) **RECOMMENDATION:** That the ammunition for the XM-35 20mm gun system be linked with all four type rounds in the belt, so that, once loaded, the aircraft can effectively engage all type targets, in varied terrain, whenever encountered. The ammunition could be linked with HE, Tracer, Armor Piercing, and Incendiary in one belt to provide this flexibility.

(d) **COMMAND ACTION:** The 334th Aviation Company (Attack Helicopter) is evaluating present ammunition and targets, and will submit a report with recommendations in the near future.

(5) **Use of Locally installed Zippers in Boot, Dust and Moisture Seals in UH-1B,D,H Helicopters.**

(a) **OBSERVATION:** Replacement of a torn or mutilated boot, dust and moisture seal (FSN 1615-615-3398) requires removal of the entire head assembly (Approximately 50 man hours).

(b) **EVALUATION:** By installing a zipper of the type found in open front jackets, (with joining studs at the bottom) replacement of dust and moisture boots can be accomplished in ten minutes.

(c) **RECOMMENDATION:** None

(d) **COMMAND ACTION:** None

(6) **Use of UH-1C Synchronized Elevators on UH-1B Gunship Tailbooms.**

(a) **OBSERVATION:** Normal gunship flight maneuvers resulted in a recurring necessity for replacement of synchronized elevators on UH-1B aircraft. Bell Helicopter Technical Representatives felt that the situation could be improved by the installation of the larger and stronger UH-1C elevators.

**CONFIDENTIAL**

AVBACA-EC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

(b) EVALUATION: UH-1C elevators were installed, inspected by Bell representatives and test flown by this unit's gunship pilots. In addition to longer life it was found that the elevators increased stability during gunruns and reduced the characteristic nose low 80 knot attitude of the UH-1B's.

(c) RECOMMENDATION: That units experiencing similar problems with UH-1B gunships evaluate this solution in regards to their particular situations.

(d) COMMAND ACTION: This unit is replacing UH-1B elevators with UH-1C elevators as required.

(7) Tracer Burnout with CTG, 20mm Electric Prime, TP-T, XM-220E1.

(a) OBSERVATION: Recent use of the XM-35 20mm system on the AH-1G, using the tracer cartridge, has proven that the tracer burnout limits the effective distance from targets at which the AH-1G can engage. This is a particularly undesirable characteristic when enemy 12.7mm or 37mm automatic weapons are encountered.

(b) EVALUATION: Tracer burnout with the TP-T, XM-220E1 cartridge seems to occur at an estimated range of 2000 meters. The range of enemy weapons far exceeds this burnout range. For optimum tactical advantage, it is desirable that the tracer range of the 20mm cartridge be extended to approximately 3000 meters slant range to give AH-1G pilots the ability to begin attacks at that distance, adjust on target, and place effective fire on enemy gun positions prior to reaching the present range at which they must engage. This is particularly desirable in view of the enemy's customary employment of heavy automatic weapons in pairs or trios, located in different positions to cover each other. By having a longer range, the AH-1G could engage one at longer range, then maneuver to place fire on others as their positions are located.

(c) RECOMMENDATION: That the tracer burnout range of the XM-220E1 20mm cartridge be extended to a minimum of 3000 meters.

(d) COMMAND ACTION: The 334th Aviation Company (Attack Helicopter) will prepare a report on the employment of this weapons system when more experience is gained in its tactical employment.

1. Others: None

**CONFIDENTIAL**

CONFIDENTIAL

AVBACA-BC

11 February 1970

SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

4 Incl  
as  
Incl 2 wd HQ, DA

*Jack Seliskar*  
JACK SELISKAR  
LTC Inf  
Commanding

DISTRIBUTION:

- 2 - CINCUSARPAC, ATTN: GPOP-DT, APO 96558
- 3 - CG, USARV, ATTN: AVHGC-DST, APO 96375
- 5 - CG, 1st Avn Bde, ATTN: AVBAGC, APO 96384
- 5 - CG, 12th Avn Gp (CAL), ATTN: AVBACA-SC, APO 96266
- 5 - CG, HQ, II AFV, ATTN: AVFEC-RE-H, APO 96266

//  
CONFIDENTIAL

**CONFIDENTIAL**

AVRACA-SC (14 Feb 70) 1st Ind


SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RCS CSFOR-65 (12) (U)

DA, HQ, 12th Avn Gp (Cbt), APO 96266 24 Feb 70

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

1. (U) In accordance with USAF Reg 525-15, subject report is forwarded.
2. (C) Reference paragraph 2f, Logistics. The 145th Avn Bn (Cbt) has 1133 (quantity) 2.75 inch FFAR with white phosphorous warhead on hand. This rocket makes an excellent marking round.
3. (U) Reference paragraph 2h, Materiel, subparagraph (2). The Army has released the Federal Stock Number for the survival vest and the unit has been informed of same. The priority of issue will be first to CV-1 and O-1 crews and then to rotary wing crews.
4. (U) Reference paragraph 2c(1). The recommendation is valid and will be passed on to the 128th AHC for their evaluation. Presently, the 190th AHC is the only unit in 12th Avn Gp to experience this problem.

FOR THE COMMANDER:

  
JOHN W. JOHNSON  
Major, Infantry  
Adjutant

12  
**CONFIDENTIAL**

**DOWNGRADED AT 3 YEAR INTERVALS;  
DECLASSIFIED AFTER 12 YEARS.  
DOD DIR 5200.10**

AVFBC-RE-H (14 Feb 70) 2nd Ind  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RCS CSFOR-65 (R2)

DA, HQ II FFORCEV, APO San Francisco 96266 7 MAR 1970

THRU: Commanding General, 1st Aviation Brigade, ATTN: AVBA-C, APO 96307  
Commanding General, US Army Vietnam, ATTN: AVHGC(DST), APO 96375  
Commander-In-Chief, US Army Pacific, ATTN: GPOR-DT, APO 96558

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

This headquarters has reviewed and concurs with the Operational Report -  
Lessons Learned of the 145th Combat Aviation Battalion for the period  
ending 31 January 1970, as indorsed, with the following comment: Paragraph  
2c(6)(b), line 1 should read UH-1C elevators were installed,...

FOR THE COMMANDER:

*W. L. Boshans*  
W. L. BOSHANS  
CPT, AGC  
Asst. AG



AVBAGC-O (14 Feb 70) 3rd Ind  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RCS CSFOR-65 (R2)

DA, HQ 1ST AVIATION BRIGADE, APO San Francisco 96384 15 MAR 1970

THRU: Commanding General, US Army Vietnam, ATTN: AVHCC (DST), APO 96575

Commander-In-Chief, US Army Pacific, ATTN: CPOP-DT, APO 96558

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

1. This headquarters has reviewed subject report and concurs with the contents as indorsed.

2. The following comments are considered pertinent:

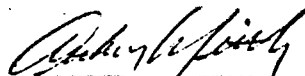
a. Paragraph 2.h.(6), page 9 and 10, discuss the installation of UH-1C elevators on UH-1B helicopters. This installation is not authorized. This headquarters has directed units to remove unauthorized assemblies.

b. Subject OR-LL does not address Aviation Safety. Records at this headquarters state the 145th Aviation Battalion (Combat) flew 31,268 hours and had 6 accidents for a rate of 19.3. This headquarters will direct subordinate units to discuss safety activities in future OR-LLs.

c. Paragraph 2.c.(2), page 5 and 6, addresses the problem of accidental discharge of door guns in secure areas. Concur with the recommendation of removing barrels upon touchdown in a secure area. Barrels should not be removed in flight. This headquarters is advising all subordinate units of this safety measure.

d. Paragraph 2.h.(5)(b), page 9, addresses the problem of the time required to replace dust and moisture seal (FSN 1615-615-3390) on UH-1 helicopters (50 man hours). Evaluation states that by using a zippered seal, the replacement time is reduced to 10 minutes. This headquarters concurs with the evaluation and has instructed the 145th Aviation Battalion (Combat) to submit an EIR on the seal.

FOR THE COMMANDER:



ARTHUR W. LITTLE  
CPT AGC  
Asst AG.

**CONFIDENTIAL**

AVHGC-DCT (14 Feb 70) 4th Ind  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)

Headquarters, United States Army, Vietnam, APO 96375 28 MAR 1970

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

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1970 from Headquarters, 145th Aviation Battalion (Combat) and concurs with the comments of indorsing headquarters.

2. (U) Comments follow:

a. (U) Reference item concerning "Prevention of Weapons System Hard Point Cracking on UH-1B Gunships", page 5, paragraph 2c(1), and paragraph 4, 1st Indorsement: concur. The difficulty is apparently isolated because no other unit has reported this problem. The 1st Aviation Brigade is disseminating the data to all units.

b. (U) Reference item concerning "Prevention of Accidental Helicopter Door Gun Firing", page 5, paragraph 2c(2), and paragraph 2c, 3rd Indorsement: concur. This information will be published in the USARV Aviation Safety Weekly Summary.

c. (U) Reference item concerning "Personnel Injured by Main Rotor Head", page 6, paragraph 2c(3): concur. This information will be published in the USARV Aviation Safety Weekly Summary.

d. (C) Reference item concerning "Lack of Target Marking Capability in 1968 Model AH-1G Aircraft", page 6, paragraph f(1): nonconcur. The 2.75" Rockets with a 10 lb warhead M-157 and M-158 were stocked in Vietnam until late 1969. Due to a lack of requirements for the item it was deleted from the inventory. If the item is reinstated its availability will be at the expense of the HE rockets presently stocked. The 2.75" Rocket, WP is available and can be used for target marking purposes. The USN and USAF use significant quantities of this munition for marking purposes. Concur with paragraph 2 of 1st Indorsement. The 2.75" FFAR with the white phosphorous warhead is excellent for use as a marking round. Sufficient 2.75" FFAR's with WP warheads are available to the 145th Aviation Battalion (Combat). This information has been passed to the 145th Aviation Battalion. No further action is required at this or higher headquarters.

DOWNGRADED AT 3 YEAR INTERVALS;  
DECLASSIFIED AFTER 12 YEARS.  
DOD DIR 5200.10

**CONFIDENTIAL**

**CONFIDENTIAL**

AVHGC-DST (14 Feb 70) 4th Ind  
SUBJECT: Operational Report - Lessons Learned, 145th Aviation Battalion  
(Combat), Period Ending 31 January 1970 RES CSFOR-65 (R2)


e. (U) Reference item concerning "Survival Equipment in AH-1G Aircraft", page 7, paragraph 2h(2), and paragraph 3, 1st Indorsement: concur. The SRU-21P survival vest has been procured, and will be an item of organizational equipment. Upon receipt of the vests, USARV will distribute them on a pro-rata basis to major units. Priority of issue will be determined by the major unit. No action by higher headquarters is recommended.

f. (C) Reference item concerning "Ammunition for the XM-35 20 mm System on AH-1G Aircraft", page 8, paragraph 2h(4): concur. In the evaluation, it is stated that four type rounds were produced. In fact, three type rounds have been produced for the XM-35 20mm gun: high explosive incendiary; tracer; and armor piercing. Present linkage is 4:1 (HEI to Tracer). Recommend that AP rounds be incorporated, with a linkage of 3:1:1 (HEI: Tracer: AP).

g. (U) Reference item concerning "Zippers in Dust Boots, UH-1", page 9, paragraph 2h(5), and paragraph 2d, 3d Indorsement: concur. However, the zipper type boot cited in the evaluation would not provide the dust and water protection which is required to prevent rust, corrosion, and contamination of the bearings in the collective hub assembly of the scissors and sleeve assembly. Concur with the 3d Indorsement, in that, an EIR be submitted.

FOR THE COMMANDER:

Cy furn:  
1st Avn Bde  
145th Avn Bn

  
L. D. MURRAY  
CPT, AGC  
Assistant Adjutant General

**CONFIDENTIAL**

GPOP-DT (14 Feb 70) 5th Ind (U)

SUBJECT: Operational Report of HQ, 145th Aviation Battalion (Combat)  
for Period Ending 31 January 1970, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 8 MAY 70

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

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

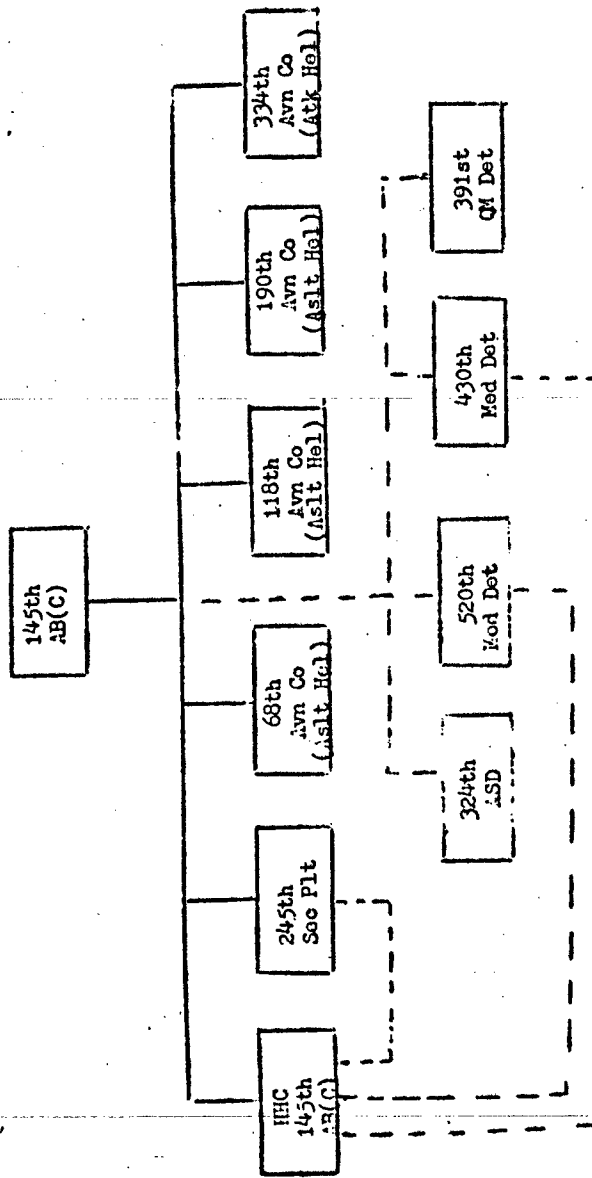
*DD Cline*  
D.D. CLINE  
2LT, AGC  
Asst AG

UNCLASSIFIED

~~CONFIDENTIAL~~

145TH AVIATION BATTALION (CONTAT)  
ORGANIZATION

Inclosure 1



The 391st QM Det is located at APO 96376, all other units are located at Bien Hoa Air Base, Vietnam, APO 96227.

— Assigned

--- Attached

~~CONFIDENTIAL~~

UNCLASSIFIED

UNCLASSIFIED

~~CONFIDENTIAL~~

HEADQUARTERS, 145TH AVIATION BATTALION (COMBAT)  
31 January 1970  
Aircraft Status

SUBORDINATE UNIT	UH-1B		UH-1C		UH-1D		UH-1H		UH-1G		OH-6	
	AUTH	O/H	AUTH	O/H	AUTH	O/H	AUTH	O/H	AUTH	O/H	AUTH	O/H
HHC, 145th AB(C)	0	0	0	0	0	2	0	0	0	0	0	0
68th Avn Co (Aslt Hel)	0	0	8	7	0	8	23	14	0	0	0	0
118th Avn Co (Aslt Hel)	0	0	8	5	0	13	23	11	0	0	0	0
190th Avn Co (Aslt Hel)	0	5	8	0	0	8	23	12	0	0	0	0
334th Avn Co (Atk Hel)	0	0	0	0	0	2	3	0	21	18	0	0
BATTALION TOTALS	0	5	24	12	0	31	72	37	21	18	0	0

Inclosure 3

19

~~CONFIDENTIAL~~

UNCLASSIFIED

UNCLASSIFIED

~~CONFIDENTIAL~~

145TH AVIATION BATTALION (COMBAT)  
31 January 1970  
OPERATIONAL STATISTICS

SUBORDINATE UNIT	HOURS FLOWN	SORTIES FLOWN	PAX	CARGO (TONS)	ENEMY (KSA)	STRUCTURES		SAMRANS		AIRCRAFT	
						DAM	DST	DAM	DST	DAM	DST
68th Avn Co (Aslt Hel)	8403	24,607	51,298	697	3	0	13	4	16	0	1
118th Avn Co (Aslt Hel)	9312	29,810	66,696	220	74	59	68	8	10	6	0
190th Avn Co (Aslt Hel)	8073	24,868	52,999	358	35	7	12	0	1	16	1
334th Avn Co (Atk Hel)	5170	9,776	977	34	91	149	200	14	26	11	5
HHC, 145th Avn Bn (C.O.)	310	474	207	4	0	0	0	0	0	2	0
<b>BATTALION TOTALS</b>	<b>31,268</b>	<b>89,535</b>	<b>172,177</b>	<b>1,313</b>	<b>203</b>	<b>215</b>	<b>293</b>	<b>26</b>	<b>53</b>	<b>35</b>	<b>7</b>

Inclosure 4

20

~~CONFIDENTIAL~~

UNCLASSIFIED

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION	
HQ, OACSFOR, DA, Washington, D.C. 20310		CONFIDENTIAL	
2b. GROUP		4	
3. REPORT TITLE			
Operational Report - Lessons Learned, HQ, 145th Aviation Battalion			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
Experiences of unit engaged in counterinsurgency operations, 1 Nov 69 to 31 Jan 70.			
5. AUTHOR(S) (First name, middle initial, last name)			
CO, 145th Aviation Battalion			
6. REPORT DATE		7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
11 February 1970		23	
8a. CONTRACT OR GRANT NO.		8b. ORIGINATOR'S REPORT NUMBER(S)	
a. PROJECT NO. N/A		701103	
c.		8c. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
N/A		OACSFOR, DA, Washington, D.C. 20310	
13. ABSTRACT			

21

DD FORM 1473  
1 NOV 69

UNCLASSIFIED  
Security Classification