SUBJECT: Final Report of Tropical Combat Hats (ACL-84/67)

TO: Commanding General
United States Army, Vietnam
ATTN: AVHGC
APO 96307

1. REFERENCES
   c. MACV Message 19542, 9 June 1966, subject: Tropical Combat Uniform.
   d. MACV Message 45400, 13 October 1966, subject: Tropical Combat Uniform.
   e. MACV-CCE Message 1766, 12 September 1966, subject: Tropical Combat Uniform (Hats).

2. PURPOSE

Determine troop acceptance and utility of full brimmed tropical combat hats with mosquito protective headnets for use in RVN and similar areas of operation.

3. BACKGROUND

The summary of the Proceedings of United States Army, Vietnam; Tropical Combat Uniform Board stated: "It was unanimously agreed that the cap field OG 106 (baseball cap) is an inadequate headgear for wear in Vietnam. The 1st Cavalry Division (AAM) representatives cited many known cases of severe sunburn because of surface exposures to the sun. It was unanimously agreed that a water resistant full brim hat that will give..."
adequate face and neck protection is urgently required. The hat should be capable of having appropriately fitted mosquito netting that would drape loosely over the shoulders." Three prototype hats were evaluated in RVN to determine if, indeed, these hats would provide adequate protection and were acceptable to the troops.

4. OBJECTIVES

a. Determine troop acceptance of the various styles of prototype Tropical Combat Hats in comparison with the cap field OG 106 (baseball cap).

b. Determine whether subject items provide increased protection against, sun, rain, and insects, in comparison with the baseball cap.

c. Determine if the mosquito headnets permit adequate visibility during both day and night.

d. Determine whether the subject items are suitable for use on any or all of the following: base camp operations, patrolling, combat operations, and combat support operations.

e. Determine if the camouflage band and the chinstrap are desirable additions.

5. DISCUSSION

a. One hundred each of three styles of hats were evaluated by elements of the 1st Cavalry Division (AM). All hats shared the same basic design: all around, full brimmed hat with band provided for attaching camouflage. A mosquito headnet was provided which slipped over the hat and extended to the neck where it was fastened with an elastic closure. Style T 66-3 is a full brimmed, felt lined, multiple stitched hat. Style T 66-4 is a round domed full brimmed hat similar to the Army fatigue cap of the 1930's. Style T 66-5 is a flat topped full brimmed model made from material similar to T 66-4.

b. A portion of the hats were evaluated by cadre of the replacement company operating in and around the base camp at An Khe. The cadre felt that hats provided them with an air of excellent corps. Their varied modes of operation (day, night, base camp, and patrolling) provided data on varied applications of the Tropical Combat Hats.

c. In addition, the hats were issued to personnel of the 1st Battalion of the 7th Cavalry and used on patrolling, base camp operations, and combat operations. The questionnaires used to collect data called for comparative, qualitative information. Personal interviews were
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conducted with selected wearers of the hats to obtain any expanded subjective and objective findings.

d. The evaluation questionnaires were prefaced with these remarks:
"...These new hats are introduced for evaluation because of the increased protection that they should provide for troop operation in a tropical environment. Appearance, although important, is of secondary interest in this evaluation."

e. The hats were worn by the evaluators for at least 30 days. The questionnaires returned were evenly divided between the replacement company cadre and line personnel of the 1st Battalion of the 7th Cavalry. The basic tenor of the responses was quite uniform throughout the evaluation. In every case, the tropical combat hats were preferred on the basis of protection afforded against the elements (sun, rain, insects) and also appearance in comparison with the baseball cap. There was no substantial preference expressed for a specific model of the Tropical Combat Hat.

f. All models of the tropical combat hat were reported to provide increased protection against the sun and, when used in combination with the insect headnet, provided increased protection against insects. The mosquito headnet was reported to be comfortable and 92 percent of the responses indicated that adequate visibility during daylight operations was provided through the headnet. Fifty-eight percent of the responses reported adequate visibility during nocturnal operations.

g. In all cases the hats were reported to be desirable for base camp operations and patrolling. Although 25 percent of the reports indicated that the hats were unsuitable for combat operations (the implication being that the steel helmet would be more desirable than a soft cap of any design), another 25 percent indicated that they were particularly well suited for combat operations. The remaining 50 percent felt that the hats would have limited use in combat operations.

h. The chin strap was reported to have specific utility for heliborne rappelling and also in intense wind and rain where the hats were likely to be blown off. In many cases, the troops were observed wearing the brim up, kept in place by the chin strap. In particular, the cadre of the replacement company wore the hat with the brim up during base camp instruction but wore the brim down during patrolling.

i. The camouflage band was very favorably received. Commanders took the option of color-coding their personnel with brightly colored ribbons, as do the Australians, or using camouflage in the band. An important aspect of the hat design is that the hats were reported to retain their shape and favorable appearance after repeated launderings and after being carried folded in fatigue pockets.
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Although the data on the evaluation questionnaires did not reveal a distinct preference for a given style of hat, personal discussions with commanders and staff officers revealed a slight preference for Model T 66-5, flat topped model similar to the Australian field cap. Indeed, if there is one model which is significantly less expensive to produce than the other two, this evaluation would support its issue. It appears, however, that Model T 66-3 involves more detailed workmanship and increased materials costs than the other two styles and recommendation of style T 66-5 is, therefore, consistent with these evaluation results as well as cost considerations.

6. FINDINGS

a. All three models of Tropical Combat Hats were well received by the evaluating troops. In all cases, the prototype hats were preferred in comparison with the standard baseball cap.

b. All three models of Tropical Combat Hats were reported to provide increased protection against sun, rain, and insects in comparison with the baseball cap.

c. The mosquito headnet was effective, comfortable, and provided adequate visibility during the day and marginal visibility during the night.

d. The Tropical Combat Hats were definitely desired for use by troops in base camp, patrolling, combat support, and combat service support operations. The hats were felt to have limited utility on combat operations.

e. The camouflage head band and the chin strap were desirable additions to the basic design of the Tropical Combat Hat.

7. CONCLUSIONS

a. Tropical Combat Hats are desirable items for general troop issue in RVN and similar areas of operations.

b. The mosquito headnet, chin strap, and camouflage band are all desirable features.

c. Increased protection is afforded against sun and insects in comparison with the baseball cap.

d. The hats were considered to be desirable on the basis of appearance.
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8. RECOMMENDATIONS

a. It is recommended that the Tropical Combat Hat, Model T 66-5, full brimmed, flat topped model, be procured for general troop issue to US Army Forces in the Republic of Vietnam.

b. Considering individual desires, type of engagements, and SOP's, the soft Tropical Combat Hats will not be generally worn in offensive combat. The hats are recommended for general issue as replacement for the baseball cap to be worn in logistical complexes, base camps, and for patrolling.

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