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DEPARTMENT OF THE ARMY
Headquarters, 101st Aviation Battalion (Night Hel)
APO San Francisco 96383

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AVDG-AVA-E

6 March 1970

SUBJECT: Night Hawk

FROM: Commanding Officer
101st Aviation Battalion (AH)
APO S.F. 96383

TO: Commanding General
101st Airborne Division (AMBL)
ATTN: AVDG-GC-T
APO S.F. 96383

1. Reference UNCLAS MSG 030028, dtd 011205-Z Mar 70, your Headquarters
Subject: Night Hawk.

2. The following comments on the operational suitability of the subject
system are forwarded per your request.

a. Number of missions: Seven (7)

b. Terrain Limitations: The system is most effective in the Piedmont
areas (Coastal Plains). System accuracy requires the pilot to remain below
1000' AGL and dictates an airspeed of 40-60 knots to insure maximum
effectiveness. While the Night Hawk can be utilized in mountainous areas,
the capabilities of the system are seriously hampered by the canopy jungle
normally associated with that type of terrain. The operational limitations
stated above would preclude the use of the system in mountainous terrain
on dark nights when ridge-lines cannot be clearly defined.

c. Weather Limitations: Flight conditions are limited to 1000 feet
ceilings and 3 miles visibility without haze or fog.

d. Effectiveness: The Night Hawk system can be utilized on night VR's
of roads, rivers and flatlands for the purpose of acquiring and engaging
targets of opportunity in any of these respective areas, and will effect-
ively limit the movement of enemy forces during hours of darkness.

e. Shortcomings: The use of Infra-red goggles or glasses would
greatly assist in this operation, by allowing the pilot and gunner to
observe the same targets the NH operator has under surveillance. This
would reduce the need for the white zeon searchlight, thereby reducing
the aircrafts exposure time to enemy anti-aircraft fire.

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f. Problems: The characteristics and capabilities of the Night Hawk system would appear to lend themselves more readily to the cavalry concept of operations. Assignment of this device to an assault helicopter battalion certainly seems questionable in view of the assault helicopter battalion mission. The system as it is mounted on a UH-1H helicopter does not allow for rapid removal or installation, therefore it is impractical to install and remove it on an individual mission basis. Consequently it remains permanently mounted and the Battalion's aircraft lift capability is reduced by one. Another problem factor for consideration involves likely areas of employment. This Battalion is somewhat restricted in the selection of a suitable AO for Night Hawk operations which reduces the capabilities of the system and defeats its designed purpose. To realize the full capabilities of this system will most certainly require its employment in a "high risk" area. In this respect the 2/17 Cavalry could effectively utilize the Night Hawk device as an integral part of its surveillance capability anywhere within the Division's area of interest. Problems relevant to coordination, control or protection of the Night Hawk aircraft and crew would be eliminated through the availability of necessary infantry and aviation assets organic to the Cavalry Squadron.

3. Recommendations: The assignment of the Night Hawk system to a lift helicopter battalion indicates little or no forethought was given to which type of unit could best utilize the system. In order that the Division may realize the maximum benefits of the Night Hawk device within its designed capabilities, it is recommended that the Night Hawk system, less the aircraft, be transferred to the 2/17 Cavalry Squadron for utilization in a surveillance and target acquisition role.

FOR THE COMMANDER:

CHARLES V. WILSON III
CPT, ADA
Adjutant

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