## Vietnam's Aerial Rocket Artillery

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ARA UH-1B over central highlands

One of the most unique organizations in the world, the US Army's 2d Battalion, 20th Artillery, part of the 1st Air Cavalry Division, is cur-recently operating in the mountainous, guerrilla-haunted central highlands of this war-torn nation.

The 20th is the first and only aerial rocket artillery (ARA) battalion in the world, and its sphere of operations, compared with even the largest conventional caliber artillery units, can only be described as enormous.

Equally enormous is the volume of firepower available within the organization—its three firing batteries have a combined firepower of 1,728 2.75 inch rockets, the equivalent of 48 battalions of 155mm howitzers, or to put it another way, one such battalion firing 48 rounds per gun.

The main weapons system employed by the flying artillerymen is a pair of rocket pods, each housing 24 2.75 inch rockets—and all 48 of these can be delivered in just four seconds.

The rockets are of a type that have been in service for several years and they are due to be replaced soon with a larger, more lethal rocket with a heavier warhead, but the same diameter, allowing them to be fired from the existing pods.

The development of aerial rocket artillery can be traced back to the early days of the airmobility experiments conducted at Ft. Benning, Ga. According to Major Joseph Lahnstein, the Battalion Executive Officer, the aerial concept was born when a means of fire support had to be found for highly mobile airtransported troops beyond the range of conventional artillery.

## **VARIOUS SYSTEMS USED**

Combat experience in Vietnam has shown that the 48-rocket system, while undoubtedly effective, can be improved. An alternate weapons system, consisting of a half-dozen wire-guided missiles mounted three on each side of a Huey, was used with considerable success against hard targets—armored vehicles, thick masonry buildings, and caves. In addition, the guided missiles, which were the modified SS-11 type, used

by the Army as an infantry anti-tank weapon, have been directed against point targets with devastating accuracy.

"But we still needed a more flexible system, one that could combine the inexpensive, but very accurate SS-11, with its capability for hitting hard point targets," explained Chief Warrant Officer Robert Maxwell, a pilot with the 20th.

Maxwell is the designer of just such a system. Blending the best of both previous systems, Maxwell mounted a wire-guided SS-11 on each side outboard of the rocket pods, then, to make up for the difference in weight, blocked off 12 rocket tubes on each side, and came up with a 24-rocket and two-guided missile system that offers the pilot a choice of the best features of both types of weapons. Because of the difference in weight between the two systems, Maxwell's rig permits the use of the newer, heavier rockets.



LTC Nelson A. Mahone (R) MAJ Roger J. Bartholomew (L)

## **ALL ARTILLERY-TRAINED**

Still another alternative to the rockets and missiles carried by the 36 Hueys in the firing batteries are the quad-machine gun outfits sported by the headquarters battery ships. These are four slightly modified M-60 machine guns, two on a side, aimed and fired by the co-pilot.

Usually the 20th receives targets beyond the range of the tube artillery, but sometimes its fire is used to supplement the conventional fire. All of the battalion's commissioned officers are artillery branch trained, and "Even our warrant officers get to feel that they are artillerymen after a while," comments the battalion's veteran commander, Lt. Col. Nelson Mahone.

This helps keep the battalion oriented on their tactical role as flying artillery. "Many people tend to class all armed helicopters as gun ships, but we consider ourselves a breed apart, and our success with artillery tends to support this," says Col. Mahone, an Army pilot for nearly twenty years.

The ARA is an artillery unit, and although they have on occasion performed the tasks usually assigned to gun ships, their real worth is demonstrated by the praise infantry leaders lavish on them.

One battalion commander with the memory of the Plei Me fighting still fresh in his mind said, "The enemy was all around us, and the volume of fire was murderous. We were taking casualties right and left, when the ARA arrived over us. Suddenly, we were alive again. They took the breath of death out of our faces and blew it back towards Charlie (the Viet Cong)."

Other infantrymen are quick to point out that only ARA can deliver quick, heavy fire as close as fifty yards to the front of friendly troops, and have virtually no danger of hitting their own soldiers.

Another unique capability of the ARA is as a counter-battery weapon, particularly against mortars. At the cavalry base camp at An Khe as well as at temporary field encampments, aerial searchlights are employed, and the combination of an armed, blacked-out Huey following the searchlight ship has been termed "the most effective counter-mortar weapon in Vietnam" by Cavalry Division officials.

The men of the 20th proudly wear the unit's distinctive **Griffin** patch on their shirt pockets. The **Griffin** was a mythical creature with the head, wings and talons of an eagle and the body of a lion. Like the **Griffin**, the aerial artillerymen have proven that they can successfully combine the strength and power of the artillery with the speed and range of the helicopter.



ARA Flight Line, AnKhe 1966



## MAXWELL SYSTEM

The text for the above article was found on the internet and is a reprint from the Army Aviation Magazine, January 1967 (Pages 41-43). The photograph that accompanied it could not be downloaded and the accompanying photographs were contributed by Jerry Barnes except for the photograph of LTC Mahone and MAJ Bartholomew. That was taken in late 1965 or early 1966 by Chip Parker. It can also be found on the Aerial Rocket Artillery Association web site (http://www.araassociation.com).