

Remembering Vietnam 3: Dealing with Anti-Aircraft Batteries

THE HO CHI MINH TRAIL 1972

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On the 50th anniversary of the first direct American military involvement in Vietnam, the Department of Defense has called upon U.S. citizens to remember with respect and gratitude those who served in Southeast Asia. This series of six articles—of which this is the third—will illuminate the significant role played in Southeast Asia by people in the tradecraft communities that now comprise the National Geospatial-Intelligence Agency (NGA).

In 1972 the North Vietnamese placed a bounty on AC-130 gunships. Previously reluctant to target these formidable aircraft for fear their muzzle flashes from the ground would bring swift retribution, the North Vietnamese anti-aircraft gunners began to take a chance at engaging AC-130s at night because of the potential rewards. The offer of cigarettes, food and various privileges now led to increased aggressiveness toward any aircraft, but the AC-130s brought the greatest attention. In his excellent history of the Air Force's efforts against the Ho Chi Minh Trail, historian Bernard Nalty noted that their first success against an AC-130 took place on March 30, 1972. This would not do.

Despite the fact that missiles had already begun to overshadow anti-aircraft guns as the primary threat, the enemy employed weapons both primitive and formidable. With their Chinese and Soviet allies providing war materials, the North Vietnamese more than doubled their inventory of heavy guns from roughly 700 to 1,500 in the early 1970s. Until 1971, the 37 millimeter weapon predominated, but by 1972 the 57 millimeter gun dominated the scene with both often mounted on trucks to address incoming American aircraft. During the Commando Hunt air campaign against the Ho Chi Minh Trail and other logistics supply avenues from November 1971 to March 1972, the power of these guns increased to 85 and 100 millimeter calibers.

Aware of the changes in North Vietnamese armament, the Air Force began guarding the AC-130s more closely, realizing their slow speed and size made them increasingly vulnerable. Personnel on these aircraft could watch for ground fire from only two positions: behind the starboard window and from a position that required the lookout to dress in cold weather gear and partially hang out over the edge of the rear cargo ramp in the slipstream of the aircraft. The lookout called back to the pilot with the origin and relative threat of ground fire by directly observing the tracers ascending from the anti-aircraft batteries. F-4 Phantom fighter-bomber aircraft now accompanied the AC-130s and, given a positive sighting of a tracer stream, could use their laser-guided bombs to home in on a gun position, destroying it or at the very least demonstrating to its crew the extreme hazard of attacking an AC-130.

The Air Force also employed high explosives dropped on identified anti-aircraft emplacements by C-130 Hercules transport aircraft. In some cases the explosive packages consisted of 15,000 pounds of explosive mounted on a pallet and sent down to the target via parachute. Amazing explosions and mixed results followed, not because of flaws in the explosive devices, but due to maps of southern Laos and Vietnam not yet corrected by loran (long-range radio navigation)-controlled photographic systems. Placing the explosives at the correct coordinates would make all the difference. The need for more efficient cartographic production and distribution led to the creation of the Defense Mapping Agency in 1972, an NGA-predecessor organization.

By the early 1970s only the few AC-130s equipped with the 105 millimeter howitzer and escorted by F-4s could duel with the North Vietnamese anti-aircraft batteries. The others needed assistance

that only imagery interpretation could provide. Close collaboration with photo interpreters eventually helped the Air Force locate and effectively target the anti-aircraft sites attacking the AC-130s. Beginning the previous January, RF-4C reconnaissance aircraft had initiated an effort to locate—through photo interpretation—as many of these anti-aircraft sites as possible. Now the forward site controllers, the AC-130 pilots, photo interpreters and the reconnaissance pilots who flew the RF-4C's began to meet regularly to closely examine the photography of essential areas of Laos and Vietnam to determine exact or suspected locations of anti-aircraft gun emplacements.

The process came together so well that in less than 12 hours after a reconnaissance flight touched down, the air controllers and pilots received imagery of the targets. The laser-guided OV-10 aircraft carried the forward air controllers to the targets along with the F-4s equipped with laser-guided bombs. The OV-10 crews used the latest imagery, as well as binoculars and a starlight scope, which acted as another source of magnification. In spite of the difference in magnification power between the two optical devices, the F-4/OV-10 missions accounted for the destruction of 12 percent of all anti-aircraft sites identified during Commando Hunt VII.

While the statistics on success seem rather meager, effective imagery penetration of the heavily forested Ho Chi Minh Trail proved a nearly insurmountable challenge. Photo interpreters continuously assaulted this challenge during the Vietnam War. Many of the interpreters who eventually found their way to the National Photographic Interpretation Center (an NGA predecessor agency) after the war became imagery analysts, and their expertise emerged from their work on photographs of the intricate North Vietnamese logistics network. In this case, however, they not only helped define a tradecraft and destroy deadly anti-aircraft guns, but they also helped account for many of the gunners and expert personnel who made the north's anti-aircraft effort a formidable opponent.

Very much like the success of American Pacific forces in World War II against the front-line cadre of Japanese fighter pilots, the north could not readily replace these assets or risk keeping them in the same place for very long without certainly losing them. This improved greatly both the opportunity to conduct successful AC-130 missions and the chance of returning the crews safely to base. P



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