Reconnaissance techniques developed for use against the Viet Cong's hidden bases may be of historic significance.

A NEW KIND OF AIR TARGETING  
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Military events that form historical watersheds are not always as clearly discernible as the battle of Waterloo or the invasion of Normandy. For this reason it might be of service to later historians for us to venture an indiscretion and register at this point the possibility that the 13th of November 1964 marked the beginning of the decline of "wars of national liberation." On that date ten A-1H fighter-bombers belonging to the Vietnamese Air Force successfully attacked a small Viet Cong base hidden away in the forest a few miles west of Saigon. This was the first attack launched against a guerrilla base area in South Vietnam with the aid of newly developed targeting techniques which have subsequently been used with increasing effect to harass the Viet Cong in territory they previously occupied unmolested.

The Strategic Base

The Communist theory of guerrilla strategy developed by Mao Tse Tung, General Giap, and others features progressive phases pivoting on the use of secure bases. At first, small guerrilla forces base themselves in remote areas where terrain, vegetation, and the lack of communications make it difficult for conventional military forces to attack them. These base areas become sanctuaries from which the guerrillas extend their operations into more populated areas and in which, as they win support among the population, they store supplies and train new recruits. As their force increases and establishes reliable sources of weapons and ammunition, some of the guerrilla troops are developed into small regular military units with professional training.

If the guerrilla campaign continues successfully, the small regular units are gradually pulled together to form larger ones. These regular formations may be sent out from time to time to engage in combat, both for training purposes and to complement the guerrillas' harassment campaign, but in general great care is exercised to avoid committing
them in circumstances that might result in their destruction. The program of guerrilla action and concurrent accretion of regular units continues until a regular military establishment has been created of sufficient strength to emerge from the base areas and destroy the government forces.

This is the strategy the Communists have followed in South Vietnam, beginning originally with a small number of guerrillas held over from the days of the war against the French. The Viet Cong established themselves in several large remote areas, including the notorious War Zones C and D and the Do Xa region. The original force was expanded rapidly, supplied with captured materiel, and established in a large number of additional base areas of varying size. Technicians and training officers, entering from North Vietnam by sea or through the jungles of Laos, began to organize the regular "main force" Viet Cong units. In at first company and later battalion strength, these units emerged from time to time to pull off an ambush, attack a hamlet, or overrun some small government post. Such operations, usually rehearsed in great detail, provided excellent training for the troops at small risk. Later, as more regular troops were organized, military operations began to involve several battalions and fairly sophisticated staff coordination.

These main force attacks added to the disrupting effect of the guerrilla campaign. Since it was often not clear whether the attackers were guerrilla or regular forces, the effect was to increase the reputation of the guerrillas and to contribute to the belief that they would ultimately be victorious. This belief was reinforced by the earlier Chinese and North Vietnamese successes gained by similar means. In the most recent phase, of course, the Viet Cong regulars have been backed up by units of the North Vietnamese army infiltrated into similar secure base areas.

There are two glaring weaknesses in the Communist strategy, however. The first is that regular units fighting against conventional forces require crew-served weapons and consume tremendous quantities of ammunition while in combat. This means that no matter how Spartan the regular force may be in other respects, it must have a dependable source for a reasonably homogeneous family of weapons, and it must have the ammunition on hand or in a well-organized pipeline to support such combat expenditures. The second is that both guerrilla troops and the main force regulars require freedom from attack in their base areas. The recruiting, organizing, and training of troops cannot be satisfactorily carried on under constant harassment.
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For the Viet Cong, the need for a sanctuary is compounded by his dependence upon his own food production. A large proportion of the time of both guerrilla and main force units is devoted to growing or collecting food. This preoccupation commits them to a particular geographic location for an extended period of time. If they are forced to move, they run the risk of losing the food in which they have already invested a considerable effort and which they must have to support their future operations.

Achilles' Heel Uncovered

These considerations led General Westmoreland in mid-1964 to order the development of a campaign of harassment directed against the Viet Cong base areas. This was easier said than done, for the Viet Cong, aware of the importance of their bases, had gone to great lengths to conceal and camouflage their activities in them. Every new military problem, however, has its solution. Just as the British learned to counter the German submarines in World War I and the U.S. cavalry learned to fight the Plains Indians in the 1870s, so it was necessary to solve this one. The solution that seems to be working was reached by combining established intelligence techniques with new methods of reconnaissance to pinpoint the location of enemy activity.

The general principle of the new method was to take the conventional black-and-white photography that provides basic coverage of an area and use it as a matrix on which to plot information from other sources suggesting the presence at a particular point of a Viet Cong unit, camp, or base that could be attacked. The main other sources were airborne radio direction finding, infrared reconnaissance, reports of aircraft hit by enemy ground fire, and reports of visual contact with Viet Cong elements. The location of the Viet Cong activity reported by such sources would be identified in the photography, which would then be reinterpreted to find the point at which an air or artillery attack would be most likely to be effective.

The method thus depended on having in hand recent high-quality photographic coverage of all areas where there might be enemy activity. Then when visual reconnaissance, say, reported probable activity at a particular location, the photo interpreter would immediately restudy the most recent coverage of that area to see if he could find new meaning in the images at that point. Even without a positive report of this kind he could compare current ad hoc recon-
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Aerial reconnaissance photography with the most recent basic coverage of the same area to see if changes in terrain, vegetation, cultural features, etc., might betray the Viet Cong at work.

Taking advantage of more sophisticated techniques, the location given by radio direction finding for an enemy transmitter would be plotted on the most recent area coverage to help the image interpreter spot signs of the unit served by the radio. Similarly, the results of infrared reconnaissance were plotted on the basic coverage so that the interpreter could discount the infrared returns for which a peaceful explanation was evident in the photography, eliminate false returns, and identify those returns which might indicate current enemy activity. In order to minimize the possibility that a target so located might move away before it could be struck, it was arranged that infrared missions would be flown in the early evening; then overnight the results were compared with existing photography, possible targets identified, and target mosaics prepared and annotated in time to use for an air strike at daylight the following morning.

The results of reconnaissance by side-looking radar, particularly the returns from a Moving Target Indicator, could likewise be plotted on the basic photography to suggest new meanings to the image interpreter. And the basic coverage was also used as a locational background for collateral information from clandestine agents, prisoner interrogation, and other human sources in order to assist the interpreter in finding signs of the enemy.

In theory it would be possible for the image interpreter to detect such probable targets, in spite of camouflage and concealment, by thoroughly scanning all area photography immediately as received. In practice, however, the volume is far in excess of what the available number of trained image interpreters could effectively handle. Superior results were obtained when other information indicating current enemy activity was used to lead the interpreter to the particular part of the photography that required intensive analysis.

Key to Victory?

This new method of selecting targets bore first fruit on 13 November 1964, and during the following months it was tried on other occasions. It proved, while not infallible, to be a great advance over the usual procedure. It came to command sufficient confidence to justify a radical expansion in the quantity of aircraft used against the Viet Cong areas. Beginning in February 1965 large numbers of U.S. aircraft were committed to augment the limited resources of the
Vietnamese Air Force. Many base areas were attacked for the first time since the beginning of the insurrection. In June 1965 the campaign was again stepped up by the use of B-52 bombers, whose heavy capability for pattern bombing is ideal against targets scattered in the jungle. With the introduction of U.S. ground forces it was also possible to increase harassment by conducting large-scale sweeps through base areas detected by these means.

As with most strategic harassment campaigns, the effects of this program are cumulative. For a while even the Viet Cong appeared unaware that something new and different was happening to them. As time went by, however, it became more and more evident that significant results were being achieved. First, Viet Cong prisoners began to confess that they had been afraid of air attack. Then they began to tell of food shortages. The number of prisoners and of defectors began to reflect the increased pressure.

In most cases it is not possible to make a ground check of the air strike results immediately because the targets are in remote areas. Often, however, stories eventually filter out through the grapevine giving the numbers of Viet Cong killed at such-and-such a place on such-and-such a date. These stories not only provide useful information concerning the effects of the campaign but also tarnish belief in the Viet Cong's ultimate victory and so increase the difficulty it has in getting support from the populace.

This strategic campaign against the Viet Cong, if it continues successful, could be in the process of completely disrupting the base system they have developed over the past six years. If this is what happens, small groups of guerrillas could probably continue to operate, but it should in the long run be impossible to keep the main force regulars intact. Thus the logical progression from guerrilla unit to regular army envisaged in the doctrine would be cut off, and what remains of the insurgency should be manageable. Such a success would shatter the myth of infallibility that invests the Mao technique and demonstrate its fatal flaw, showing that guerrilla forces cannot count on the sanctuary of invulnerable base areas.

The actual effect to date of the harassment campaign directed against the Viet Cong has been obscured by the introduction of regular North Vietnamese troops and by the continued accretion of independent Viet Cong companies and platoons to form new main force battalions. Both of these actions make the enemy ground forces appear stronger in the short term in spite of the disruption of the bases. What the net effect will be is not clear, but it is possible that both
of these actions may in the long run hasten the effects of the harassment. Both actions introduce new units designed for major combat which must be supported by the base system. In other words they increase the demands on the bases at the very time that the bases themselves are being reduced in capability.

While it would thus be premature for us to say that the new reconnaissance techniques have led to a turning-point in history, it may not be too bold of us to record the possibility for future examination.